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THE

WEEKLY WEATHER REPORT

OF THE

METEOROLOGICAL OFFICE

FOR THE YEAR

1886

(VOL. III.—NEW SERIES)

CONTAINING

SYNOPTIC CHARTS,

AND

DESCRIPTIVE SUMMARIES OF THE WEATHER FOR EACH DAY;

ALSO

TABULAR SUMMARIES OF TEMPERATURE, RAINFALL, AND BRIGHT SUNSHINE, FOR EACH WEEK.

WITH THREE APPENDICES.

Published by the Authority of the Meteorological Council.

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PREFACE.

In the Weekly Weather Report for 1886 six new columns have been added to the Table on the first page of each Report, giving the difference between the progressive values for the current year and the means for the corresponding period in preceding years for each of the following elements:—

Accumulated Temperature, above and below 42°.

Rainfall, numbers of rainy days, and amounts collected.

Bright Sunshine, numbers of hours registered, and percentage of possible duration.

The general arrangement of the Report is as follows:—

LIST OF DISTRICTS.

For the purpose of this Report the United Kingdom is divided into 11 Districts, which are shown on the accompanying map, distinguished by the numbers 0 to 10. The positions of the stations supplying information are marked on the map by black dots, and their names are given in the following list, arranged under the districts to which they belong:—

METEOROLOGICAL DISTRICTS.

0. SCOTLAND, N.—Sumburgh Head, Stornoway, Wick.

1. SCOTLAND, E.—Nairn, Aberdeen, Leith.

2. ENGLAND, N.E.—Alnwick Castle, Durham,* Shields, Scarborough, York, Spurn Head.

3. ENGLAND, E.—Hillington, Yarmouth, Geldeston, Cambridge, Rothamsted, Ingatestone.*

4. MIDLAND COUNTIES.—Bawtry, Loughborough, Leicester, Cheadle, Churchstoke, Hereford, Cirencester, Oxford.

5. ENGLAND, S.—London, Strathfield Turgiss, Dungeness, Hastings (St. Leonard's), Southampton, Hurst Castle, Stowell.†

6. SCOTLAND, W.—Laudale (Loch Sunart), Glasgow, Ardrossan, Douglas (Isle of Man).

7. ENGLAND, N.W.—Newton Reigny (Penrith), Barrow-in-Furness, Stonyhurst, Blackpool, Manchester, Liverpool Observatory (Bidston), Llandudno, Holyhead.

8. ENGLAND, S.W.—Llandovery, Pembroke, Arlington (N. Devon), Cullompton, Falmouth, Plymouth, Prawle Point.

9. IRELAND, N.—Malin Head, Londonderry, Mullaghmore, Belmullet, Markree Castle, Brookeborough, Armagh, Donaghadee, Edgeworthstown.

10. IRELAND, S.—Dublin, Parsonstown, Kilkenny, Waterford, Roche's Point, Valencia, Killarney, Foynes.

Besides these stations there are two in the Channel Islands, viz., Scilly (St. Mary's), and Jersey (Noirmont), which cannot be conveniently placed in any of the Districts.

TEMPERATURE.

The Summary on the first page of each Report gives for each week and each District the absolute *maximum* and *minimum*, the averages of both the daily extremes, the daily mean, and its difference from the mean of the corresponding period as derived from observations of the 20 years, 1861–80, together with the values for Accumulated Temperature above and below 42° F.

Daily Mean Temperature.

The daily mean Temperature shown in the Tables is calculated from the mean between the daily maxima and minima, due regard being had for the varying relation found to subsist, from month to month, between the true mean temperature of the day derived from 24 hourly observations, and the means of the daily maxima and minima for a series of years, as recorded at Greenwich and the self-registering Observatories of the Meteorological Council.

The approximate Mean Daily Temperature in any week is found by multiplying the *difference* between the means of the seven observed maxima and minima by the proper coefficient for the month, as shown in the following Table, and adding the product to the observed minimum:—

Months.	Coefficient.
January. December.	0·520
February. November.	0·500
March. October.	0·485
April. September.	0·476
May. August.	0·470
June. July.	0·465

Example:

The mean maximum temperature for a week in December being	48°·1
The mean minimum	39·3
The difference is	8·8

This difference 8·8 × ·520 (the coefficient for December) = 4·6.

This product when added to the mean minimum, 39·3, gives 43°·9, the required mean daily temperature of the week.

Accumulated Temperature.

The Tables of Accumulated Temperature are designed to give persons engaged in agriculture better means of estimating the manner in which vegetation is affected by temperature than that afforded by the more usual methods of treating the readings of the thermometer. They show for each week, and for the whole period from the commencement of the year, the weekly and progressive values, respectively, of the combined amount and duration of the excess or defect of the air temperature, above or below a suitably fixed standard, or *base temperature*. The base adopted

* These stations came into operation after the year had commenced.

† This station was substituted for Marlborough, from which place the observer removed at the end of 1885.

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is 42° F., as being nearly equivalent to 6° C. This has been considered by Continental writers on these subjects to be the critical value, the temperature above which is mainly effectual in starting and maintaining growth, and in completing the ripening, of agricultural crops in a European climate. This base is also convenient as being 10° F. above the freezing point on the Fahrenheit scale.

The Accumulated Temperature is expressed in Day-degrees; a Day-degree signifying 1° F. of excess or defect of temperature above or below 42° F. continued for 24 hours; or any other number of degrees for an inversely proportional number of hours.

When the temperature during any period remains either wholly above or below the base temperature, the difference between the base and the mean temperature gives the correct accumulated temperature. In other cases this difference gives an approximate value for the accumulated temperature, which does not depart greatly from the truth, the deviation depending on the greater or less extent of the variations of the temperature above or below the base. Further, since the mean between the maximum and minimum of any day is nearly equal to the mean temperature of the day, the difference of the mean of the maximum and minimum from the base will also give, directly, an approximation to the accumulated temperature for the day.

The following rules, however, supply a still closer approximation to the true values sought, and they have been adopted for the preparation of the Tables in the Report. They may be applied to any other base temperature as well as to 42° F., with the slight modification of the numerical coefficients mentioned below.

RULES for computing, for a WEEKLY PERIOD, the ACCUMULATED TEMPERATURE above or below 42° F. from the observed MAXIMA and MINIMA.

1. Obtain the mean temperature, from the means of the seven observed maxima and minima, in the manner already described for daily values.

2. In obtaining the accumulated temperature four cases may occur, to which the following rules will apply:—

Conditions of Temperature.	To obtain the Accumulated Temperature.	
	Above 42° F.	Below 42° F.
If the minimum is *above* 42° F. or *equal* to 42° F. -	Subtract 42° F. from the mean.	There is none.
If the minimum is *below* 42° F., but the mean for the day is *above* 42° F.	From the difference between the mean for the day and the minimum deduct the accumulated temperature below 42° F., calculated as stated in the next column.	The required quantity is the excess of 42° F. over the minimum multiplied by the coefficient 0·4.
If the mean for the day is *below* 42° F., but the maximum is *above* 42° F.	The required quantity is the excess of the maximum over 42° F. multiplied by the co-efficient 0·4.	From the difference between the mean for the day and the minimum deduct the accumulated temperature above 42° F., calculated as stated in the preceding column.
If the maximum is *below* 42° F., or *equal* to 42° F. -	There is none.	Subtract the mean from 42° F.

In each of the above cases the result will be the average daily value, and must be multiplied by 7 in order to obtain the value for the whole week.

The coefficient varies with the duration of the period, and also with the base temperature.

The coefficient above given, in Rule 2, is for a weekly period, and for the base temperature 42° F. The following are its values for other base temperatures, viz., for 32° F., 0·4; for 52° F., 0·33; for 62° F., 0·25.

A full explanation of the principles on which these rules are based will be found in Appendix II. to the Quarterly Weather Report for 1878.

RAINFALL.

The Summary gives for each week and each District the number of rainy days, and the total fall of rain, as well as the progressive values reckoned from the commencement of the year, and the difference between these amounts and the means for the corresponding week in the 20 years 1866–85.

BRIGHT SUNSHINE.

The Summary gives for each week and each District the numbers of hours of sunshine recorded, and the percentage of that time to the whole time during which the sun is above the horizon; also the progressive values reckoned from the commencement of the year, together with the difference between them and the mean for the corresponding period in the five years 1881 to 1885.

APPENDICES.

Appendix I.—This contains (1) Summaries for each Quarter and for the whole year of the Temperature and Rainfall records for each District, and (2) Tables giving for each district the monthly values for Rainfall, Accumulated Temperature (above and below 42° F.), and Bright Sunshine, as well as the progressive values for each from the commencement of the year, in continuation of the values given for 1878 to 1885.

Appendix II. gives for years 1885 and 1886, and for each District, the weekly and progressive values for Rainy days, Amount of Rainfall, Accumulated Temperature (above and below 42° F.), and Bright Sunshine, in continuation of the values for the years 1878–84 printed in Appendix II. to the Weekly Weather Report for 1884.

Appendix III. gives for each District, during the eight years 1878–85, the mean aggregate values from the beginning of the year to the end of each week in the year for the following elements: Days of Rain, Amount of Rainfall; and for the five years 1881–85 the corresponding values for Bright Sunshine.

Tables showing for each degree of Latitude from 49° N. to 58° N. and for each Weekly and Monthly period the total number of hours during which the Sun is above the Horizon, together with their Reciprocals, are given in the Preface to Vol. I. of this Series.

TABLE SHOWING THE REPORTS RECEIVED TOO LATE FOR INSERTION IN THEIR PROPER PLACES.

No. of Report.	For Week ending	Names of Stations.	Temperature. (In Degrees Fahrenheit.)								Rainfall. (Amounts in tenths of an inch.)			Bright Sunshine.	
			Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day Degrees).		Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Per-centage of possible duration.
					Of Highest each day.	Of Lowest each day.	For whole of the day.		Above 42° F.	Below 42° F.					
			°	°	°	°	°	°				Inches.	Inches.		
1	January 4	Llandudno	53	31	47·6	39·6	43·8	+ 2·1	23	7	6	1·63	+0·94	2	4
2	„ 11	Laudale	44	22	38·5	27·9	33·4	− 6·0	0	60	5	1·52	−0·45	*	*
9	March 1	Alnwick Castle	38	27	35·3	29·3	32·3	− 6·7	0	68	7	0·94	+0·39	*	*
10	„ 8	Londonderry	45	28	41·7	30·4	35·9	− 5·0	0	43	0	—	−0·65	*	*
17	April 26	Strathfield Turgiss	72	36	63·7	38·6	50·6	+ 1·8	74	10	0	—	−0·43	*	*
18	May 3	Strathfield Turgiss	73	26	62·0	34·1	47·4	− 2·1	71	22	1	0·08	−0·31	*	*
23	June 7	Llandudno	63	46	58·0	47·9	52·6	− 3·4	74	0	2	0·70	+0·31	23	20
24	„ 14	Scarborough	65	45	58·1	48·2	52·8	− 1·9	76	0	3	0·25	−0·22	*	*
25	„ 21	Waterford	75	48	68·6	50·1	58·7	+ 0·2	117	0	1	0·05	−0·54	*	*
28	July 12	Cheadle	76	45	65·9	50·8	57·8	− 2·5	111	0	2	0·33	−0·37	*	*
„	„ 12	Strathfield Turgiss	85	45	74·5	50·6	61·7	+ 0·7	138	0	2	0·44	−0·07	*	*
„	„ 12	Llandudno	71	48	65·8	53·1	59·0	− 1·6	119	0	1	0·16	−0·44	50	43
31	August 2	Churchstoke	64	38	62·2	46·8	54·0	− 6·0	84	0	5	0·71	+0·13	37	34
32	„ 9	Llandudno	68	45	64·7	53·5	58·8	− 1·8	118	0	2	0·11	−0·49	38	36
33	„ 16	Llandudno	67	49	64·3	52·4	58·0	− 2·5	112	0	5	0·73	+0·13	34	33
35	„ 30	Brookeborough	69	48	65·6	52·9	58·9	+ 1·1	118	0	4	0·97	?	*	*
„	„ 30	Foynes	72	49	68·3	55·0	61·2	+ 3·2	134	0	3	0·39	?	*	*
„	„ 30	Scilly	69	56	67·6	57·9	62·5	+ 1·8	144	0	0	—	−0·62	*	*
37	September 13	Hereford	72	42	69·1	51·3	59·8	+ 2·5	125	0	3	0·70	−0·04	*	*
„	„ 13	Waterford	65	44	62·7	51·5	56·8	+ 0·3	104	0	6	2·06	+1·16	*	*
39	„ 27	Llandudno	60	45	57·2	48·9	52·8	− 3·0	76	0	3	1·12	+0·31	11	13
40	October 4	Scilly	66	55	64·0	56·4	60·1	+ 3·4	127	0	7	0·76	−0·11	*	*
41	„ 11	Llandudno	72	47	61·3	50·0	55·5	+ 2·3	95	0	4	0·83	−0·05	18	23
„	„ 11	Scilly	64	54	61·7	53·4	57·4	+ 1·5	108	0	6	0·94	+0·07	*	*
42	„ 18	Llandudno	62	46	56·4	48·5	52·3	+ 0·7	72	0	7	1·83	+0·93	7	10
„	„ 18	Scilly	61	44	56·6	49·6	53·0	− 1·9	77	0	7	1·23	+0·36	*	*
47	November 22	Llandudno	56	39	51·3	43·8	47·6	+ 3·6	39	0	5	0·45	−0·36	21	36
51	December 20	Manchester	39	19	35·0	26·2	30·8	− 8·8	0	78	5	0·57	−0·26	*	*
„	„ 20	Markree Castle	40	9	36·3	23·9	30·3	−10·7	0	82	6	1·40	+0·62	14	28
52	„ 27	Laudale	44	23	40·9	31·7	36·5	− 3·6	0	39	6	4·06	+1·93	*	*
„	„ 27	Llandudno	48	26	43·7	34·3	40·2	− 2·0	5	23	6	0·46	−0·26	4	8
53	January 3, 1887	Llandudno	45	30	42·0	34·0	38·2	− 4·0	0	27	3	0·43	−0·27	7	13
„	„ „ „	Waterford	47	26	44·9	33·4	39·4	− 2·5	8	34	5	0·84	−0·17	*	*

WEEKLY WEATHER REPORT.

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VOL. III. No. 1.] *New Series.* WEEK ENDING MONDAY, 4TH JANUARY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day degrees—a "Day degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85,* but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface of Vol. I., No. 1., of this Series.

Temperature of the Air.

	DISTRICTS (See p. 4.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	51	22	43·7	32·5	38·3	1 below.	5	36	5	0	36	+ 3
	1. SCOTLAND, EAST	57	25	46·0	34·8	40·6	3 above.	11	29	11	+ 7	29	− 12
	2. ENGLAND, N.E.	53	22	46·4	35·7	41·3	3 above.	12	27	12	+ 5	27	− 2
	3. ENGLAND, EAST	53	23	46·2	35·4	40·5	3 above.	12	31	12	+ 2	31	+ 1
	4. MIDLAND COUNTIES	54	22	48·2	35·6	41·6	4 above.	17	25	17	+ 5	25	− 4
	5. ENGLAND, SOUTH	53	26	47·2	36·6	42·2	3 above.	24	15	24	+ 11	15	− 3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	53	25	46·9	38·3	42·8	3 above.	21	10	21	+ 12	10	− 17
	7. ENGLAND, N.W.	53	24	46·3	37·4	42·0	2 above.	12	13	12	+ 1	13	− 10
	8. ENGLAND, S.W.	54	31	48·5	40·0	44·1	2 above.	23	6	23	+ 3	6	− 4
	9. IRELAND, NORTH	55	25	47·3	38·0	42·8	2 above.	22	11	22	+ 7	11	− 8
	10. IRELAND, SOUTH	53	29	48·8	39·4	44·3	2 above.	27	7	27	+ 4	7	− 4
	— CHANNEL ISLANDS	52	34	49·4	43·5	46·6	2 above.	32	0	32	+ 5	0	− 5

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 4.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.							
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	21	12 more.	7	+ 2	2·1	+ 1·2	4	9	4	− 1	9	− 3
	1. SCOTLAND, EAST	5	6	1 more.	5	+ 2	0·6	+ 0·1	12	26	12	+ 1	26	+ 2
	2. ENGLAND, N.E.	3	3	3 less.	3	0	0·3	− 0 3	4	8	4	− 3	8	− 5
	3. ENGLAND, EAST	6	6	1 more.	6	+ 2	0·6	+ 0·1	11	21	11	+ 1	21	+ 3
	4. MIDLAND COUNTIES	5	5	1 less.	5	+ 1	0·5	− 0·1	5	10	5	− 4	10	− 7
	5. ENGLAND, SOUTH	5	7	1 more.	5	+ 1	0·7	+ 0·1	6	11	6	− 4	11	− 6
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	7	25	3 more.	7	+ 3	2·5	+ 0·3	4	9	4	− 2	9	− 3
	7. ENGLAND, N.W.	6	17	9 more.	6	+ 2	1·7	+ 0·9	3	5	3	− 5	5	− 9
	8. ENGLAND, S.W.	6	10	0 (average).	6	+ 1	1·0	0·0	4	7	4	− 8	7	−15
	9. IRELAND, NORTH	6	11	4 more.	6	+ 1	1·1	+ 0·4	4	7	4	− 7	7	−14
	10. IRELAND, SOUTH	5	7	2 less.	5	0	0·7	− 0·2	5	10	5	− 9	10	−17
	— CHANNEL ISLANDS	7	8	1 less.	7	+ 2	0·8	− 0·1	5	9	5	− 9	9	−16

General Remarks.

Weather has been in a dull and unsettled condition generally, with rather frequent falls of rain at our southern stations, and of rain, hail, or snow in the north.

Temperature has been one degree below the mean in "Scotland, N.", but from 2° to 4° above it in all other districts. The maxima, which were recorded on different days in the various parts of the Kingdom, ranged from 51° in "Scotland, N." to 53° or 54° over England, to 55° in "Ireland, N." and to 57° in "Scotland, E." The minima were generally registered on December 30th, when the thermometer fell to 22° in the "Midland Counties" "England, N.E.", and "Scotland, N.", and to between 23° and 34° elsewhere. On January 1st and 2nd the minima at most of our stations were no lower than 45°, while in a few places the temperature did not fall below 47° or 48°.

Rainfall has been more than the mean in most districts, considerably so in the north and west of Scotland and the north-west of England. In "England, N.E.", the "Midland Counties", "Ireland, S.", and the "Channel Islands", however, the amount has been rather less than the normal value, and in "England, S.W." about equal to it.

Bright sunshine has again been very little prevalent, the percentages of the possible duration ranging from 5 to 10 in most parts of the country to 21 in "England, E." and 26 in "Scotland, E."

Depressions observed.—A series of depressions has travelled in an easterly or north-easterly direction at a great distance to the northward of our Islands, while a few subsidiary disturbances have passed in similar directions across the United Kingdom and the North Sea. Westerly winds have consequently been most prevalent on our coasts, and on some occasions, especially in the north and north-west, they have at times increased to the force of a strong breeze or gale.

* NOTE.—It will be observed that the *Mean Rainfall for the Week* is now the Mean obtained from 20 instead of 15 years observations.

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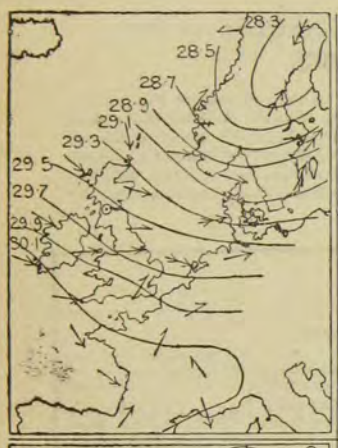
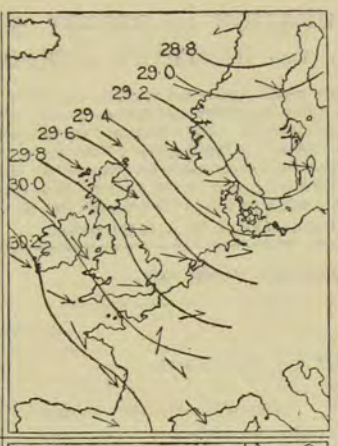
II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind.		Weather	Synoptic Charts. Temperature and Weather
8 a.m.	6 p.m.	During the 24 hours succeeding 8 a.m. on the dates given.	at 8 a.m.





Tuesday, December 29.

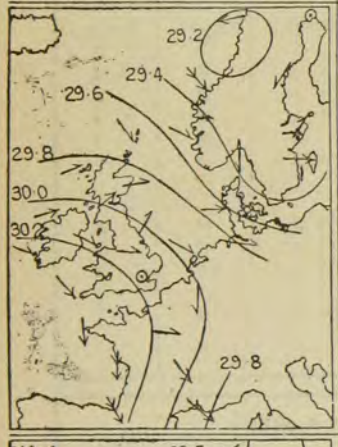
Weather fine on our eastern and southern coasts, but cloudy or overcast elsewhere, with snow at some of the northern stations and hail in the west. Snow or hail falling later in all parts of the Kingdom, and thunderstorms occurring at Liverpool and Jersey.

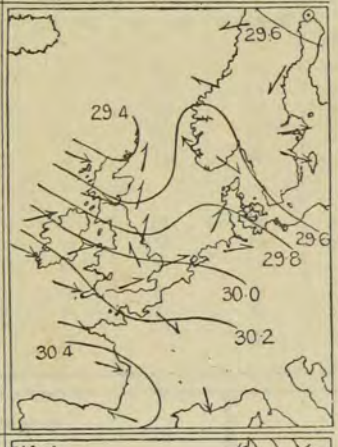
Temperature risen several degrees in France, but fallen considerably elsewhere; readings ranging from 44° at Scilly to 25° at Wick and Nairn. Sharp frost over England at night.

Wind North-Easterly in the north of Scandinavia and South-Westerly in the south of Sweden, but Westerly or North-Westerly elsewhere; fresh or strong in force generally, with gale in Sweden, Denmark, and the south of Norway. Fresh to strong North-Westerly gales on our west coasts later.

Sea rough on all the more exposed parts of our coasts.

Barometer rising in our Islands, but falling at many of the Continental stations. Anticyclone lying over the Bay of Biscay and south of France, with a deep depression over the Gulf of Bothnia. Shallow subsidiary disturbances appearing over England later, occasioning slight fall of mercury in many places.





Wednesday, December 30.

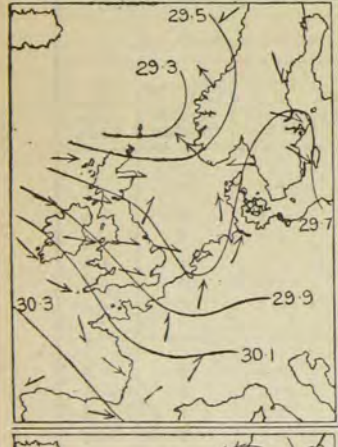
Weather fine at our eastern, southern, and the French stations, but dull elsewhere, with snow at Stornoway and rain in the north of Ireland. Snow falling later at several of our northern and eastern stations, and rain in the west and south-west.

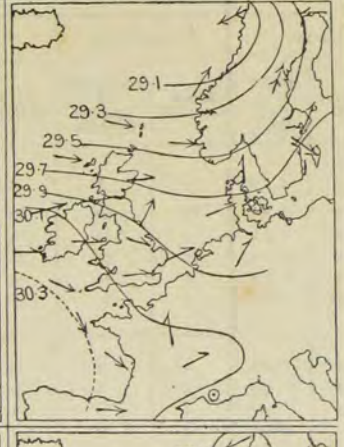
Temperature risen a little in Scotland and Ireland, but fallen elsewhere; readings ranging from 46° at Belmullet and Valencia to 26° at Yarmouth.

Wind South-Westerly on our extreme north-west coasts, but Westerly or North-Westerly elsewhere; light or moderate in force in most districts. Subsequently increasing to strong breeze or gale from North-West on our western coasts.

Sea rough off the west of Norway as well as at Spurn Head, Mullaghmore, and Scilly; moderate to smooth elsewhere.

Barometer rising on all but our extreme north-west coasts. Anticyclone lying over the Bay of Biscay, and shallow depression over the north of Norway. New depression subsequently appearing off north of Scotland, occasioning brisk and general fall of barometer.





Thursday, December 31.

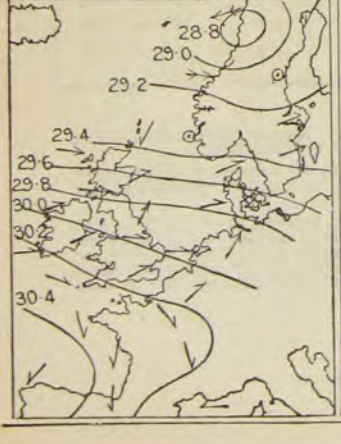
Weather fine on the east coasts of Great Britain as well as at many of the Continental stations, but dull elsewhere, with rain in the north of Ireland. Slight rain falling later in most places.

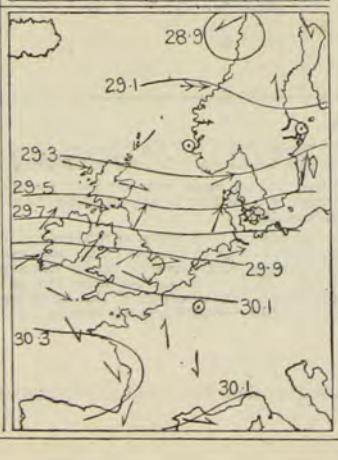
Temperature risen considerably; readings ranging from 50° at Valencia and Scilly to 41° at Spurn Head.

Wind South-Easterly or Southerly on the eastern shores of the North Sea, but Westerly or North-Westerly elsewhere; fresh or strong in force in many places. Subsequently moderating generally.

Sea rough on our western coasts and also at Stornoway, but moderate to smooth elsewhere.

Barometer rising on our western and northern coasts as well as in Sweden, but falling in the east and south. Depression of previous day lying to the northward of the Shetlands at 8 a.m., but subsequently moving away in a north-easterly direction.





Friday, January 1.

Weather cloudy or overcast generally, with rain in the north of Scotland, the east of England, and west of Norway. Rain falling later in most parts of the Kingdom.

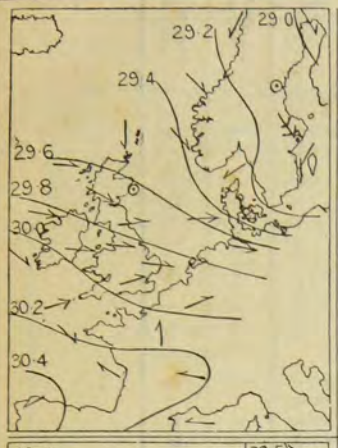
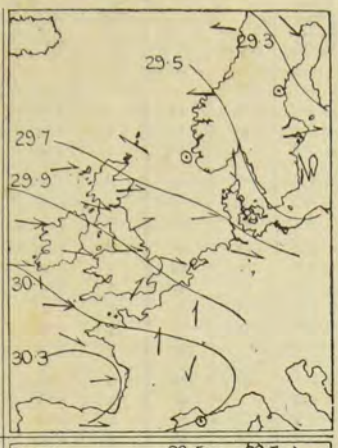
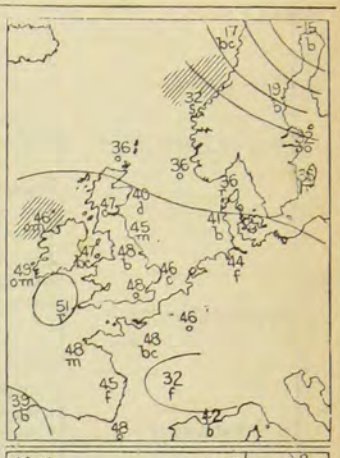
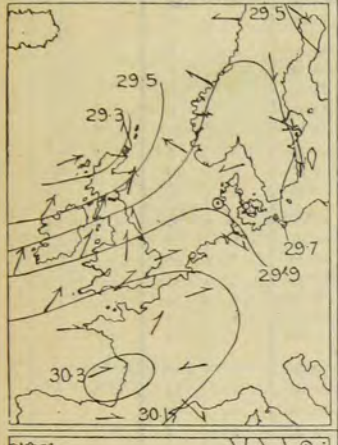
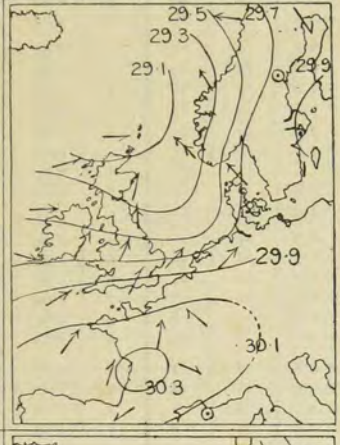
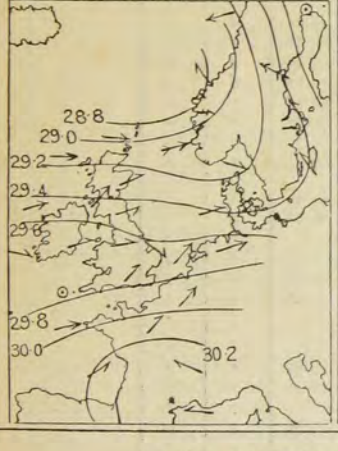
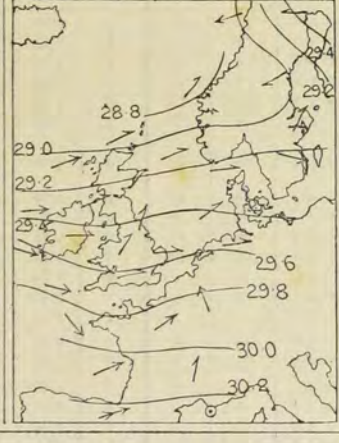
Temperature fallen slightly on our south-west coasts, but risen elsewhere; readings ranging from 53° at Nairn and Aberdeen to 40° at Sumburgh Head. Thermometer subsequently rising to 57° at Aberdeen.

Wind North-Easterly in the north of Scandinavia, but chiefly Westerly elsewhere, fresh or strong in force at several of the more exposed stations.

Sea rather rough in the extreme north and north-west.

Barometer falling a little in the west and north, but rising elsewhere. Anticyclone lying over Bay of Biscay, and depression of previous two days now lying near Bodö. Fall taking place generally later, and small subsidiary disturbance appearing off the north-east of Scotland.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, January 2.** *Weather* fair in the north and east of England and also in the east of Ireland, but cloudy or overcast elsewhere, with rain in many places. *Temperature* risen slightly in south, but fallen elsewhere; readings ranging from 51° at Scilly to 36° in the Shetlands. *Wind* Northerly in Scandinavia and Easterly in the south of France, but chiefly Westerly elsewhere; light or moderate in force generally. *Sea* rather rough off the north of Ireland, moderate to smooth elsewhere. *Barometer* rising in the north-west and north, but falling in all other districts. Anticyclone lying over the Bay of Biscay and France, with lowest pressure over the Gulf of Bothnia. Rise taking place generally later.	
		**Sunday, January 3.** *Weather* rainy in Ireland and the west of Scotland, and foggy in the south-west of England, but fair or fine elsewhere. Rain falling later at all but our north-eastern stations, and lightning seen in the north of Scotland at night. *Temperature* fallen several degrees over England, but risen slightly elsewhere; readings ranging from 51° at Parsonstown and Valencia to 34° at Cambridge. *Wind* Northerly in Sweden and South-Easterly in Norway, but South-Westerly over our Islands and the greater part of France; strong in force on our western and extreme northern coasts. Subsequently rising to fresh gale at our south-western and southern stations. *Sea* rough at Valencia, rather rough off the west coasts of Ireland and Scotland, moderate to smooth elsewhere. *Barometer* falling briskly in west and north, but rising at our south-eastern and the Continental stations. Anticyclone lying over France, and large depression approaching Scotland from the westward. Subsidiary disturbances appearing over Ireland and England later, occasioning general fall of barometer.	
		**Monday, January 4.** *Weather* rainy in the south of England, and showery in the north of Ireland, but fair in most other localities. Showers of snow or hail falling at our northern stations later. *Temperature* fallen a few degrees in the west and north, but risen elsewhere; readings ranging from 50° at Scilly and Prawle Point to 35° at Wick, Nairn, and Aberdeen. Frost in Scotland at night. *Wind* South-Easterly in Sweden and the north of Norway, but Westerly or South-Westerly in our Islands and France; moderate to strong in force generally. Subsequently veering to West-North-West on our western coasts. *Sea* rough off the north of Scotland, and rather rough in the western part of the Channel, as well as at Mullaghmore. *Barometer* falling generally. Pressure highest in the south of France, with depression of previous day lying to the northward of the Shetlands. Depression subsequently moving eastwards, but subsidiary disturbances appearing over England.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 1 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	47	26	42·3	33·0	37·8	− 2·2	1	33	7	1·74	+0·83	*	*
	Stornoway	51	23	45·6	33·3	39·6	+ 0·4	10	34	7	3·11	+1·89	4	9
	Wick	50	22	43·1	31·3	37·4	− 1·5	3	40	7	1·43	+0·83	*	*
1. SCOTLAND, E.	Nairn	53	25	45·4	34·1	40·0	+ 2·3	10	32	6	1·10	+0·63	*	*
	Aberdeen	57	25	46·1	34·4	40·5	+ 3·0	11	31	4	0·30	−0·34	12	26
	Leith	52	25	46·4	36·0	41·4	+ 3·6	12	25	4	0·42	−0·03	*	*
2. ENGLAND, N.E.	Alnwick Castle	52	25	45·7	36·4	41·2	+ 3·5	10	23	2	0·38	−0·25	*	*
	Durham	52	24	48·2	35·1	41·9	+ 4·2	17	30	1	0·04	−0·58	8	16
	Shields	53	22	46·3	35·4	41·1	+ 2·4	12	28	3	0·19	−0·32	*	*
	Scarborough ℔	51	27	46·4	36·2	41·5	+ 3·5	12	25	5	0·35	−0·22	*	*
	York	53	24	47·4	35·4	41·6	+ 3·4	15	28	5	0·32	−0·17	0	0
	Spurn Head	49	24	44·4	35·9	40·3	+ 2·6	7	24	4	0·28	?	*	*
3. ENGLAND, E.	Hillington ℔	51	26	45·4	35·1	40·5	+ 3·1	10	28	5	0·61	+0·11	12	23
	Yarmouth	50	23	45·3	33·6	39·7	+ 2·1	9	33	5	0·72	+0·24	*	*
	Geldeston	51	23	45·9	34·5	40·4	+ 1·9	11	30	6	0·49	+0·05	12	22
	Cambridge	53	24	48·1	34·1	41·3	+ 3·4	17	34	6	0·46	+0·06	9	17
	Rothamsted	53	25	46·5	34·6	40·8	+ 3·3	13	31	7	0·68	+0·07	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	52	24	47·4	36·0	41·9	+ 3·2	15	26	6	0·43	−0·05	4	8
	Loughborough	51	26	47·1	37·0	42·3	+ 4·6	23	14	4	0·38	−0·12	*	*
	Leicester	51	26	46·7	36·2	41·7	+ 4·3	13	25	3	0·47	−0·02	2	4
	Cheadle ℔	50	22	45·5	34·2	40·1	+ 2·9	10	32	6	1·07	+0·38	*	*
	Churchstoke ℔	52	23	47·5	36·2	42·1	+ 3·9	25	16	5	0·55	−0·15	6	12
	Hereford ℔	54	25	48·7	36·0	42·6	+ 4·0	29	17	4	0·20	−0·38	*	*
	Cirencester	51	24	46·4	33·1	40·0	+ 1·7	12	36	4	0·11	−0·61	7	13
	Oxford	52	28	48·0	36·0	42·2	+ 3·2	27	17	4	0·45	−0·05	8	15
5. ENGLAND, S.	London†	53	27	48·4	35·6	42·3	+ 3·3	29	18	5	0·70	+0·21	3	5
	Strathfield Turgiss ℔	52	26	48·1	35·3	42·0	+ 3·2	17	19	4	0·53	−0·01	*	*
	Dungeness	49	26	47·3	35·1	41·4	+ 0·7	15	29	6	0·86	+0·19	*	*
	Hastings (St. Leonard's)	49	29	45·4	37·2	41·5	+ 1·2	10	21	6	0·92	+0·25	8	15
	Southampton	51	29	48·0	37·9	43·2	+ 4·0	26	11	5	0·66	−0·08	7	13
	Hurst Castle	49	30	46·6	38·7	42·8	+ 1·6	19	9	4	0·71	+0·04	*	*
	Stowell ℔	51	28	46·9	36·4	41·9	+ 3·7	14	25	5	0·50	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	53	28	47·5	38·1	43·0	+ 3·3	23	11	7	5·99	+3·96	*	*
	Glasgow	51	25	46·6	36·2	41·6	+ 3·0	13	25	7	1·42	+0·42	6	13
	Ardrossan	50	30	46·3	38·9	42·8	+ 3·6	19	9	7	1·26	+0·29	*	*
	Douglas (Isle of Man)	51	30	47·2	39·9	43·7	+ 3·0	21	6	7	1·20	+0·12	2	4
7. ENGLAND, N.W.	Newton Reigny (Penrith)	50	24	45·9	35·8	41·1	+ 3·6	11	26	7	1·81	+0·98	4	8
	Barrow-in-Furness	47	31	44·9	38·9	42·0	+ 1·5	8	9	7	1·16	+0·33	*	*
	Stonyhurst	51	25	47·4	36·2	42·0	+ 4·5	15	16	6	3·60	+2·59	2	4
	Blackpool ℔	49	31	44·8	38·4	41·7	+ 1·1	8	15	7	1·46	+0·73	2	4
	Manchester	52	24	46·3	37·4	42·0	+ 2·3	12	13	6	1·71	+0·78	*	*
	Liverpool Obsy (Bidston)	53	32	47·1	39·4	43·4	+ 3·2	21	7	6	0·96	+0·42	*	*
	Llandudno ℔													
	Holyhead	50	31	47·1	36·7	42·1	+ 1·0	23	15	6	0·68	−0·16	*	*
8. ENGLAND, S.W.	Llandovery	51	31	47·4	36·9	42·4	+ 2·3	24	14	7	1·65	+0·41	*	*
	Pembroke	49	38	47·6	43·0	43·4	+ 0·7	10	0	5	0·65	−0·25	3	6
	Arlington (N. Devon)	49	32	46·6	37·9	42·4	+ 2·0	20	11	6	1·47	?	*	*
	Cullompton ℔	54	31	49·5	38·5	44·2	+ 3·0	30	10	5	0·61	−0·17	5	9
	Falmouth	52	37	49·5	43·5	46·6	+ 3·8	32	0	6	0·92	−0·35	4	7
	Plymouth	53	32	50·5	40·4	45·7	+ 2·1	33	4	7	0·67	−0·21	4	7
	Prawle Point	50	31	48·1	39·9	44·2	+ 1·6	24	6	7	1·30	?	*	*
9. IRELAND, N.	Malin Head	50	30	48·1	38·0	43·3	+ 2·9	26	11	7	1·26	?	*	*
	Londonderry	55	30	48·4	38·7	43·7	+ 2·8	26	9	7	1·74	+0·85	*	*
	Mullaghmore	52	33	48·0	40·9	44·6	+ 2·4	23	3	7	1·36	+0·47	*	*
	Belmullet	51	32	48·4	41·7	45·2	+ 1·0	24	1	6	1·37	?	*	*
	Markree Castle	52	31	47·0	38·0	42·7	+ 1·0	22	11	7	1·12	+0·34	4	8
	Brookeborough	51	25	46·3	36·2	41·5	+ 1·5	12	25	6	1·38	?	*	*
	Armagh	53	25	46·6	36·8	41·9	+ 2·2	13	23	6	1·02	+0·36	3	6
	Donaghadee	52	29	46·6	35·4	41·2	+ 0·2	13	28	6	0·45	−0·22	*	*
	Edgeworthstown	51	28	46·5	36·0	41·5	+ 2·1	13	26	4	0·64	−0·03	*	*
10. IRELAND, S.	Dublin	53	31	47·8	39·3	43·7	+ 2·7	23	8	5	0·40	−0·11	5	10
	Parsonstown	52	31	47·7	36·4	42·3	+ 2·3	26	16	5	0·84	+0·15	5	10
	Kilkenny	52	29	47·9	36·9	42·6	+ 2·8	26	14	5	0·54	−0·22	*	*
	Waterford	52	31	47·9	38·3	43·3	+ 1·6	25	10	3	0·43	−0·56	*	*
	Roche's Point	53	35	50·1	40·1	45·2	+ 2·2	30	5	4	0·53	−0·64	*	*
	Valencia	54	36	50·4	43·0	46·9	+ 1·5	34	0	6	1·06	−0·36	5	9
	Killarney	53	34	49·9	41·7	46·0	+ 2·6	29	1	6	1·00	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	40	50·1	44·7	47·5	+ 2·0	39	0	7	0·80	−0·11	*	*
	Jersey (Noirmont)	50	34	48·7	42·3	45·6	+ 2·7	25	0	7	0·74	−0·05	5	9

Stations marked ℔ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

Note.—The reports from Marlborough have now ceased; but a new station (Stowell, near Sherborne) has been substituted for it.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 2.] *New Series.* WEEK ENDING MONDAY, 11TH JANUARY, 1886. [*Price 4d.* [*Annual subscription, post paid,* £1 1s. 2d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day degrees—a "Day degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85,* but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 8.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	44	20	37·4	28·3	33·0	6 below.	0	63	5	− 5	99	+ 28
	1. SCOTLAND, EAST	42	15	36·6	26·1	31·6	6 below.	0	73	11	+ 1	102	+ 17
	2. ENGLAND, N.E.	41	18	36·7	26·8	31·9	6 below.	0	71	12	+ 1	98	+ 25
	3. ENGLAND, EAST	41	6	35·8	26·3	31·3	6 below.	0	75	12	− 2	106	+ 23
	4. MIDLAND COUNTIES	48	10	37·0	25·9	31·7	6 below.	0	72	17	− 2	97	+ 17
	5. ENGLAND, SOUTH	48	11	39·2	28·4	33·9	6 below.	0	57	24	+ 4	72	+ 9
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST*	46	19	38·6	29·2	34·1	5 below.	0	55	21	+ 4	65	+ 1
	7. ENGLAND, N.W.	47	15	38·8	28·8	34·0	6 below.	0	56	20	+ 3	68	+ 6
	8. ENGLAND, S.W.	47	13	42·4	31·2	37·0	5 below.	1	39	24	− 10	45	+ 9
	9. IRELAND, NORTH	49	15	41·7	31·3	36·8	4 below.	0	36	22	− 5	47	− 2
	10. IRELAND, SOUTH*	51	16	43·4	32·8	38·3	4 below.	4	35	31	− 8	42	+ 6
	— CHANNEL ISLANDS	50	32	45·5	37·5	41·7	3 below.	10	20	42	0	20	+ 1

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 8.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.							
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	10	1 more.	14	+ 4	3·1	+ 1·7	7	15	11	− 1	12	− 1
	1. SCOTLAND, EAST	4	5	0 (average).	9	+ 3	1·1	+ 0·4	9	19	21	0	22	0
	2. ENGLAND, N.E.	5	6	2 more.	8	+ 1	0·9	+ 0·2	10	19	14	0	14	0
	3. ENGLAND, EAST	5	7	3 more.	11	+ 3	1·3	+ 0·5	17	32	28	+ 8	26	+ 8
	4. MIDLAND COUNTIES	4	7	1 more.	9	+ 2	1·2	+ 0·5	15	27	20	+ 3	19	+ 3
	5. ENGLAND, SOUTH	5	10	3 more.	10	+ 3	1·7	+ 0·8	17	30	23	+ 5	21	+ 4
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST*	4	6	4 less.	11	+ 3	3·1	+ 1·4	19	37	23	+10	23	+10
	7. ENGLAND, N.W.	5	8	1 more.	11	+ 4	2·5	+ 1·3	12	23	15	0	15	0
	8. ENGLAND, S.W.	5	8	2 less.	11	+ 3	1·8	+ 0·4	16	29	20	− 3	18	− 3
	9. IRELAND, NORTH	5	8	0 (average).	11	+ 2	1·9	+ 0·6	9	17	13	− 5	13	− 5
	10. IRELAND, SOUTH*	4	5	4 less.	9	+ 1	1·2	− 0·4	11	20	16	− 9	15	−10
	— CHANNEL ISLANDS	6	6	2 less.	13	+ 4	1·4	+ 0·1	19	33	24	− 7	21	− 6

General Remarks.

Weather has been in an exceedingly unsettled, changeable condition. Heavy falls of snow and severe frost have alternated with showers of sleet, rain, and brief periods of thaw.

Temperature has been much below the mean, the deficit ranging from 3° in the "Channel Islands" and 4° over Ireland, to 5° or 6° in all other parts of the Kingdom. The maxima, which were recorded on different days in the various districts, ranged from 41° in the east and north-east of England to 51° in "Ireland, S." The minima, which were generally registered during the evening of the 7th or on the morning of the 8th, were very low; in "England, E." (at Rothamsted) the thermometer fell to 6°, in the "Midland Counties" to 10°, and in "England, S." to 11°, while elsewhere the readings ranged from 13° in "England, S.W." (at Llandovery), to 20° in "Scotland, N." and to 32° in the "Channel Islands".

Rainfall has been rather more than the mean in most of the Wheat-producing districts, but a little less in the majority of the Grazing districts.

Bright sunshine shows an increase on that reported last week, the percentages of the possible duration varied between 15 in "Scotland, N.", 33 in the "Channel Islands", and 37 in "Scotland, W."

Depressions observed.—Several depressions appeared in our area during this period and the distribution of pressure varied considerably. The disturbances which most affected the winds and weather over our Islands were (1) A small but well defined system, which at 8 A.M. on the 6th lay over the Bristol Channel and subsequently moved southwards and south-eastwards; and (2) A much larger and deeper depression which advanced from the westward to the north of Scotland and afterwards (during the 8th and 9th) moved south-south-eastwards down the North Sea. The former occasioned fresh Easterly or North-Easterly winds on nearly all our coasts and a heavy fall of snow at our more southern and south-eastern stations. The latter brought very violent North-Westerly gales, with snow, to the Scotch coasts and strong North-Westerly breezes, with snow or sleet showers, to all other parts of the Kingdom.

* The values in these districts are liable to some alteration owing to the non-arrival of the observations from Laudale and Foynes.

B 20371. 350.—1/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

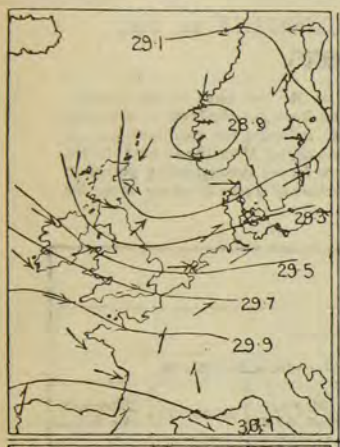
Weather

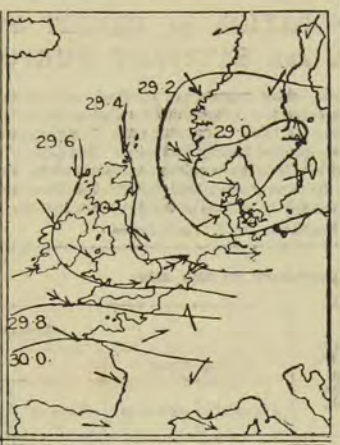
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, January 5.

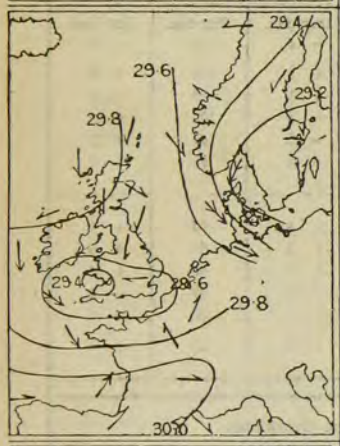
Weather fair over Western, Central, and Southern England, but cloudy or overcast elsewhere, with snow showers in many places. Snow falling later at all our northern stations, with hail and rain in the west and south-west.

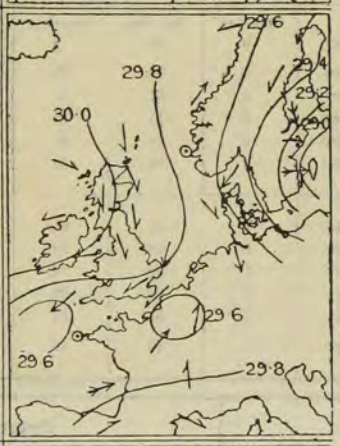
Temperature fallen a little generally; readings ranging from 44° at Scilly to 31° in the Shetlands. Sharp frost occurring at night over Scotland and the north of England.

Wind North-Easterly over the northern parts of Scotland and Scandinavia, but Westerly or North-Westerly on our western coasts, and South-Westerly in the east; fresh or strong in force generally, with gales at several of our western stations. Subsequently backing to the Southward of West at Valencia.

Sea high at Scilly, and rough or rather so on all but our east coasts.

Barometer falling at our eastern and the Continental stations, but rising elsewhere. Pressure highest in Spain, with a large depression over Norway. Depression subsequently moving south-eastwards, but new disturbance approaching the west of Ireland.





Wednesday, January 6.

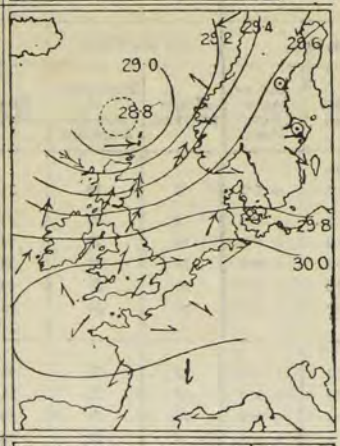
Weather fine in the north, but cloudy elsewhere, with rain over the Channel and west of France, and heavy snow in London and at Oxford. Some improvement taking place in south later, but cold showers falling in many places.

Temperature fallen generally; readings ranging from 45° at Scilly to 25° at Nairn. Hard frost occurring over Great Britain at night; thermometer falling to 15° at Aberdeen, 18° at Oxford, 19° at York, and 20° at Wick.

Wind strong to gale from North-West on eastern shores of North Sea, and moderate or fresh from between North and North-East over the greater part of our Islands, but strong to a gale from West over the Bay of Biscay and mouth of the Channel.

Sea high at Scilly, and rough on our south-west coasts generally as well as in the Bay of Biscay.

Barometer falling at our southern and the French stations, but rising elsewhere. Norwegian depression of previous day now lying over the south of Sweden, but new and rather deep disturbance shown over North Devon. Latter system subsequently moving southwards and dispersing.



Thursday, January 7.

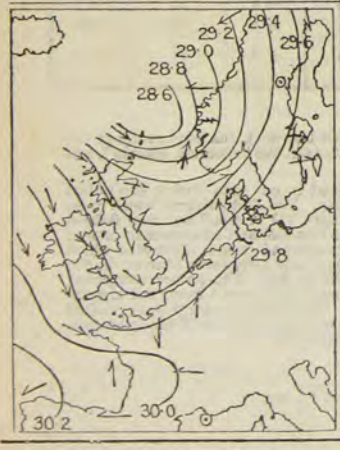
Weather dull and unsettled over the Baltic, the south of France, and our extreme north and north-west coasts, but fine elsewhere. Rain followed by heavy snow occurring at our northern stations later.

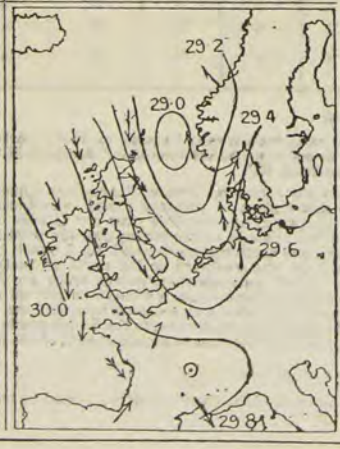
Temperature risen a little in the north-west, but fallen elsewhere; readings ranging from 39° at Belmullet and 38° at Scilly to 18° at Oxford. Hard frost occurring over England in evening; thermometer falling to 14° at Dungeness and Oxford, 18° in London, and 19° at Shields and York.

Wind fresh South-Westerly on our northern coasts, but North-Easterly at our southern and the French stations. Subsequently increasing to strong gale from South-West and West over Scotland and the north of Ireland.

Sea rather rough at the mouth of the Channel and at Shields, moderate to smooth elsewhere.

Barometer falling briskly in the extreme west and north-west, but rising in most other localities. Anticyclone lying over the greater part of Ireland and England, and deep depression approaching the north of Scotland. Depression subsequently moving eastwards, and barometric fall extending southwards.





Friday, January 8.

Weather fair in the east of England and also over France and our south-west coasts, but dull elsewhere, with snow at our northern and north-western stations, as well as at Oxford and in London. Snow continuing in east of Scotland all day.

Temperature fallen a little in the north of Scotland, but risen elsewhere; readings ranging from 47° at Scilly to 30° at York. Sharp frost occurring over Great Britain at night.

Wind North-Westerly over the greater part of our Islands, but Southerly on the eastern shores of the North Sea; strong in force in most places, with severe gale in the north of Scotland. Gale moderating somewhat later.

Sea very high in the extreme north, and rough on our western and northern coasts generally.

Barometer rising in most parts of the United Kingdom, but falling elsewhere. Deep depression of previous day lying to the northward of the Shetlands in morning, but subsequently growing shallower and moving south-eastwards.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

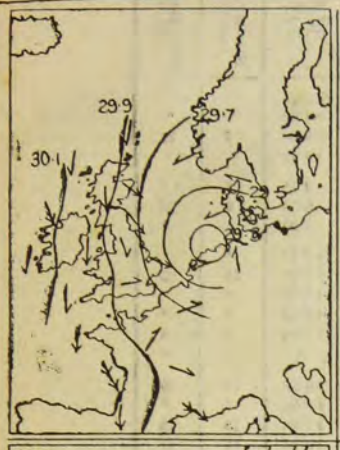
Weather

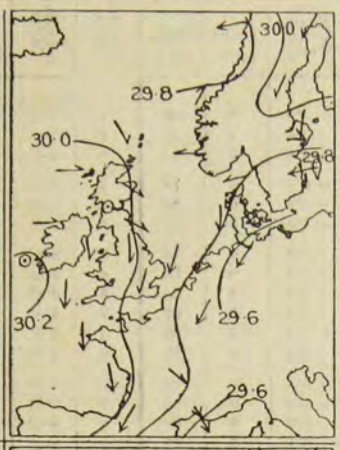
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, January 9.

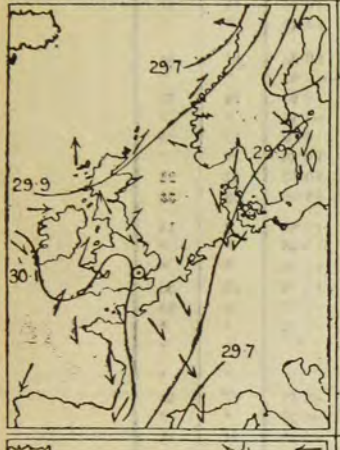
Weather fair in many parts of Great Britain, but overcast at the Continental stations as well as on our extreme north-west coasts. Rain or sleet falling later in the west and north. Bright aurora seen in Scotland at night.

Temperature risen slightly at most of our northern stations, but fallen elsewhere; readings ranging from 44° at Valencia to 25° at Dungeness. Sharp frost over Great Britain at night.

Wind Easterly or North-Easterly in Denmark and the south of Norway, but Northerly or North-Westerly elsewhere; fresh to strong in force on all but our extreme west and north-west coasts. Subsequently backing to West and South-West on the west coasts of Ireland and Scotland.

Sea rough at Scilly and Yarmouth, and rather rough on most exposed parts of our coasts.

Barometer falling a little in the Netherlands and east of France, but rising elsewhere. Pressure now highest to the westward of our Islands, with depression of previous day over the southern parts of the North Sea. New fall of barometer taking place on our north-west coasts later.



Sunday, January 10.

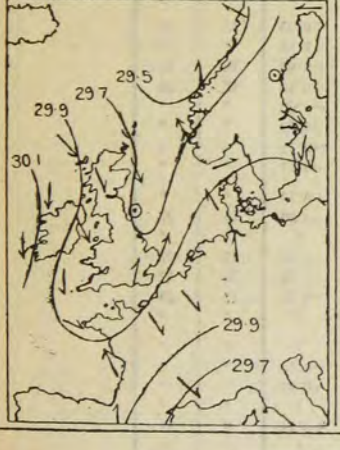
Weather cloudy or overcast in most places, with rain at several of our north-western stations, and snow in the north of England as well as at Nairn. Snow or sleet falling later in most parts of the Kingdom.

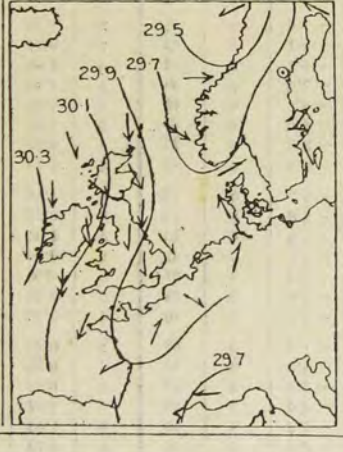
Temperature risen several degrees in the west and north-west, but fallen elsewhere; readings ranging from 48° at Belmullet and Valencia to 25° at York. Rise taking place over England at night.

Wind light or moderate from the South-Westward on our north and north-west coasts, but Northerly at our southern and the French stations. South-Westerly breezes subsequently becoming general.

Sea rough at Yarmouth and rather rough at Stornoway, but moderate to smooth elsewhere.

Barometer rising at all but our western and northern stations. Areas of high pressure lying over Scandinavia and the Bay of Biscay, with depression off the north-west of Scotland and shallow disturbance at the mouth of the St. George's Channel. Fall taking place generally later.





Monday, January 11.

Weather fine at most of our western and northern stations, but dull elsewhere, with rain over the eastern and southern parts of England. Snow showers falling in Scotland later.

Temperature fallen a little in Ireland, but risen several degrees over Great Britain; readings ranging from 48° at Scilly to 34° at York, Spurn Head, and Yarmouth. Frost occurring in many places at night.

Wind moderate or fresh from South on our south-east coasts, and also on the eastern shores of the North Sea, but strong Northerly in the west. Northerly breezes subsequently extending to the east of England.

Sea rough or rather so on our western coasts, as well as at Yatmouth.

Barometer falling at our eastern and many of the continental stations, but rising in the west. Large depression lying off the west of Norway, with subsidiary disturbances over England and the North Sea. Depressions moving eastwards later, and barometer rising in East England.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 5 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	41	25	37·7	29·0	33·3	− 6·3	0	61	7	0·43	−0·44	*	*
	Stornoway	44	25	39·4	29·1	34·5	− 4·4	0	53	7	1·18	−0·02	7	15
	Wick	38	20	35·1	26·9	31·2	− 7·2	0	76	6	1·30	+0·79	*	*
1. SCOTLAND, E.	Nairn	39	22	35·4	25·6	30·7	− 6·8	0	79	5	0·32	−0·15	*	*
	Aberdeen	38	15	35·6	24·9	30·5	− 6·7	0	81	5	0·77	+0·18	9	19
	Leith	42	21	38·9	27·7	33·5	− 3·9	0	60	2	0·45	0·00	*	*
2. ENGLAND, N.E.	Alnwick Castle	39	20	36·6	27·0	32·0	− 5·4	0	70	5	0·68	+0·13	*	*
	Durham	39	18	35·8	25·6	30·9	− 6·3	0	78	4	0·51	−0·01	15	29
	Shields	39	19	36·7	25·9	31·5	− 6·9	0	74	3	0·53	+0·08	*	*
	Scarborough ℻	41	25	37·0	28·1	32·7	− 5·0	0	65	7	0·91	+0·43	*	*
	York	41	19	36·6	24·0	33·6	− 7·4	0	80	4	0·67	+0·22	4	8
	Spurn Head	40	26	37·3	30·3	33·9	− 4·7	0	57	6	0·54	?	*	*
3. ENGLAND, E.	Hillington ℻	40	24	36·1	27·7	32·1	− 5·1	0	69	5	0·99	+0·53	16	30
	Yarmouth	39	23	36·4	29·0	32·9	− 5·4	0	64	7	0·85	+0·34	*	*
	Geldeston	41	21	37·2	26·9	32·3	− 5·9	0	68	5	0·46	+0·06	19	35
	Cambridge	41	22	35·9	26·3	31·3	− 6·1	0	75	5	0·61	+0·24	17	31
	Rothamsted	41	6	33·6	21·7	27·9	− 9·3	0	99	5	0·63	+0·12	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	43	22	38·3	25·9	32·4	− 6·0	0	67	2	0·65	+0·20	16	30
	Loughborough	48	25	38·7	28·6	33·9	− 3·3	0	57	3	0·42	−0·07	*	*
	Leicester	41	24	36·6	27·9	32·4	− 4·6	0	67	3	0·37	−0·09	12	23
	Cheadle ℻	40	23	34·8	27·0	31·1	− 5·8	0	76	4	0·52	−0·13	*	*
	Churchstoke ℻	41	15	37·1	26·3	31·9	− 6·0	0	71	3	0·67	0·00	15	28
	Hereford ℻	44	13	38·1	23·1	30·9	− 7·3	0	78	5	0·88	+0·28	*	*
	Cirencester	40	10	36·6	22·9	30·0	− 8·0	0	84	3	1·08	+0·33	12	22
	Oxford	42	14	36·1	25·3	30·9	− 7·8	0	78	5	1·00	+0·49	18	33
5. ENGLAND, S.	London†	43	18	37·0	27·9	32·6	− 6·1	0	66	5	1·19	+0·69	8	14
	Strathfield Turgiss ℻	41	11	36·5	24·1	30·5	− 7·7	0	81	3	0·71	+0·13	*	*
	Dungeness	44	14	39·7	27·0	33·6	− 6·6	0	59	5	1·67	+1·02	*	*
	Hastings (St. Leonard's)	45	26	39·6	30·1	35·0	− 4·7	0	49	6	1·61	+0·94	21	38
	Southampton	43	25	38·9	29·5	34·2	− 4·7	0	55	5	0·62	−0·16	21	38
	Hurst Castle	48	26	43·7	31·9	38·0	− 2·7	5	38	4	0·44	−0·25	*	*
	Stowell ℻	42	22	39·0	28·0	33·7	− 7·0	0	58	5	0·48	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡												*	*
	Glasgow	43	19	37·0	26·6	32·0	− 6·3	0	70	3	0·34	−0·67	17	34
	Ardrossan	42	22	39·0	29·9	34·6	− 4·6	0	52	5	0·81	−0·19	*	*
	Douglas (Isle of Man)	46	21	39·8	31·2	35·7	− 4·9	0	44	5	0·70	−0·41	21	40
7. ENGLAND, N.W.	Newton Reigny (Penrith)	38	15	34·6	24·0	29·6	− 7·6	0	87	3	1·18	+0·33	15	29
	Barrow-in-Furness	41	26	38·4	29·4	34·1	− 6·1	0	55	7	0·97	+0·10	*	*
	Stonyhurst	44	20	39·7	26·0	33·1	− 5·1	0	62	4	1·05	+0·08	11	21
	Blackpool ℻	42	21	38·9	27·5	35·4	− 7·0	0	60	4	0·86	+0·16	17	33
	Manchester	41	23	36·0	28·0	32·2	− 6·6	0	69	4	0·68	−0·09	*	*
	Liverpool Obsy (Bidston)	44	28	39·4	31·6	35·7	− 4·0	0	44	5	0·58	+0·05	*	*
	Llandudno ℻	46	26	41·7	33·4	37·8	− 3·6	0	29	5	0·53	−0·14	4	8
	Holyhead	47	27	41·7	30·4	36·3	− 6·4	0	40	4	0·69	−0·12	*	*
8. ENGLAND, S.W.	Llandovery	44	13	38·9	22·9	31·2	− 8·7	0	76	6	1·38	+0·13	*	*
	Pembroke	47	30	44·0	35·6	40·0	− 2·6	6	25	5	0·77	−0·30	15	27
	Arlington (N. Devon)	45	24	40·4	30·0	35·4	− 4·9	0	46	5	1·41	?	*	*
	Cullompton ℻	46	21	41·8	30·1	36·1	− 5·0	0	41	5	0·56	−0·23	15	27
	Falmouth	47	28	43·6	34·9	39·4	− 4·3	4	27	5	0·69	−0·59	18	32
	Plymouth	47	26	44·0	33·2	38·8	− 3·6	6	34	6	0·51	−0·39	17	30
	Prawle Point	46	25	44·4	31·6	38·3	− 3·9	7	40	4	0·59	?	*	*
9. IRELAND, N.	Malin Head	48	26	44·0	32·6	38·5	− 1·8	6	36	4	0·61	?	*	*
	Londonderry	46	24	42·1	30·6	36·6	− 4·3	0	42	6	0·81	−0·09	*	*
	Mullaghmore	47	32	42·7	36·0	39·5	− 2·9	2	23	6	0·79	−0·06	*	*
	Belmullet	49	28	44·4	35·6	40·2	− 4·0	7	25	7	1·07	?	*	*
	Markree Castle	48	17	42·6	30·0	36·6	− 5·2	2	45	6	1·03	+0·25	7	13
	Brookeborough	46	15	39·5	27·9	33·9	− 6·2	0	57	3	0·70	?	*	*
	Armagh	46	20	39·6	29·0	34·6	− 5·0	0	52	5	0·48	−0·19	11	21
	Donaghadee	45	22	40·3	30·0	35·4	− 5·3	0	46	5	0·76	+0·09	*	*
	Edgeworthstown	47	17	40·1	29·9	35·7	− 3·5	0	44	4	0·54	−0·14	*	*
10. IRELAND, S.	Dublin	47	25	41·5	32·7	37·3	− 3·4	0	33	4	0·34	−0·16	12	23
	Parsonstown	48	18	41·4	30·3	36·1	− 3·9	0	41	4	0·31	−0·39	11	21
	Kilkenny	49	16	40·5	29·6	35·3	− 4·3	0	47	3	0·60	−0·20	*	*
	Waterford	49	22	42·6	32·9	37·9	− 3·7	2	33	3	0·49	−0·55	*	*
	Roche's Point	49	28	46·0	35·0	40·7	− 2·2	11	29	5	0·56	−0·67	*	*
	Valencia	51	27	46·9	36·7	42·0	− 3·3	14	15	4	0·60	−0·87	9	16
	Killarney	49	20	45·2	32·2	39·0	− 4·4	9	39	4	0·81	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	50	35	47·0	38·7	43·0	− 3·2	21	9	6	0·46	−0·44	*	*
	Jersey (Noirmont)	48	32	44·0	36·3	40·3	− 2·1	6	22	5	0·80	+0·03	19	33

Stations marked ℻ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 3.] *New Series.* WEEK ENDING MONDAY, 18TH JANUARY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day degrees—a "Day degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 12.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.	Day deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	18	38·6	29·5	34·2	5 below.	0	55	5	− 15	154	+ 49
	1. SCOTLAND, EAST	48	19	39·0	30·3	34·8	3 below.	0	50	11	− 10	152	+ 24
	2. ENGLAND, N.E.	48	18	40·6	31·8	36·5	1 below.	0	39	12	− 7	137	+ 22
	3. ENGLAND, EAST	47	27	39·4	31·3	35·5	2 below.	0	46	12	− 8	152	+ 19
	4. MIDLAND COUNTIES	50	21	42·2	31·3	37·0	1 below.	1	39	18	− 10	136	+ 8
	5. ENGLAND, SOUTH	49	27	44·0	32·0	38·3	1 below.	6	39	30	+ 1	111	+ 7
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	49	17	42·8	31·7	37·5	2 below.	2	38	23	− 5	†105	+ 6
	7. ENGLAND, N.W.	49	15	41·4	32·9	37·3	2 below.	0	33	20	− 6	101	+ 4
	8. ENGLAND, S.W.	51	22	45·4	33·3	39·6	2 below.	10	35	34	− 13	80	+ 18
	9. IRELAND, NORTH	51	24	42·6	33·1	38·0	3 below.	2	33	24	− 16	80	0
	10. IRELAND, SOUTH *	53	24	45·0	34·1	39·8	2 below.	8	32	39	− 19	74	+ 11
	— CHANNEL ISLANDS	51	35	46·7	39·4	43·2	1 below.	19	7	61	+ 2	27	− 8

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 12.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.							
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	14	5 more.	21	+ 6	4·5	+ 1·9	2	4	13	− 8	9	− 5
	1. SCOTLAND, EAST	4	5	1 more.	13	+ 4	1·6	+ 0·1	16	32	37	+ 2	26	+ 2
	2. ENGLAND, N.E.	5	5	0 (average).	13	+ 4	1·4	0·0	14	26	28	+ 8	18	+ 5
	3. ENGLAND, EAST	5	7	3 more.	16	+ 6	2·0	+ 0·6	15	26	43	+17	26	+10
	4. MIDLAND COUNTIES	6	10	4 more.	15	+ 6	2·2	+ 0·5	19	34	39	+16	24	+10
	5. ENGLAND, SOUTH	5	11	5 more.	15	+ 6	2·8	+ 0·9	19	33	42	+19	25	+11
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	7	10	1 less.	18	+ 7	4·1	+ 1·0	9	17	32	+10	21	+ 7
	7. ENGLAND, N.W.	6	13	5 more.	17	+ 7	3·8	+ 1·5	10	19	25	+ 2	16	+ 2
	8. ENGLAND, S.W.	7	13	3 more.	18	+ 7	3·1	0·0	17	27	37	+ 4	22	+ 3
	9. IRELAND, NORTH	6	16	8 more.	17	+ 3	3·5	+ 1·2	4	8	17	−15	11	− 8
	10. IRELAND, SOUTH *	6	11	1 more.	15	+ 3	2·3	− 0·6	9	17	25	−14	15	− 9
	— CHANNEL ISLANDS	7	11	3 more.	20	+ 8	2·5	0·0	22	37	46	+ 2	26	+ 1

General Remarks.

Weather has continued in a very changeable condition generally, with frequent showers of snow, sleet, hail, or rain. Thunder and lightning were experienced over our south-western counties on the 16th.

Temperature has again been below the mean, the deficit varying between 1° in "England, N.E.", the "Midland Counties", "England, S.", and the "Channel Islands", 3° in "Scotland, E.", "England, N.W.", and "Ireland, N.", and 5° in "Scotland, N." The maxima, which were registered on different days in the various districts, ranged from 53° in "Ireland, S." to 46° in "Scotland, N." The minima, which over the greater part of the Kingdom were recorded on the 18th, ranged from 15° in "England, N.W." to 24° over Ireland, 27° in "England, S." and "England, E.", and to 35° in the "Channel Islands".

Rainfall has been slightly less than the mean in "Scotland, W." and about equal to it in "England, N.E.", but more in all other districts.

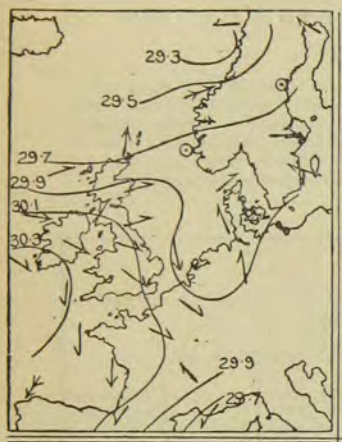
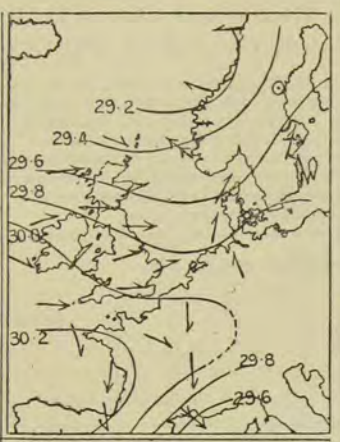
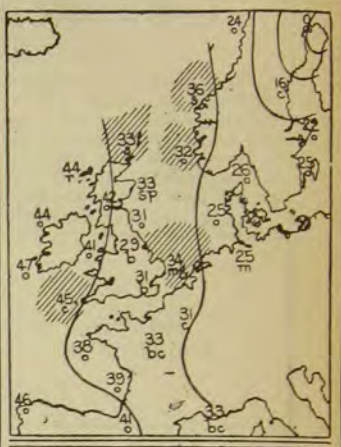
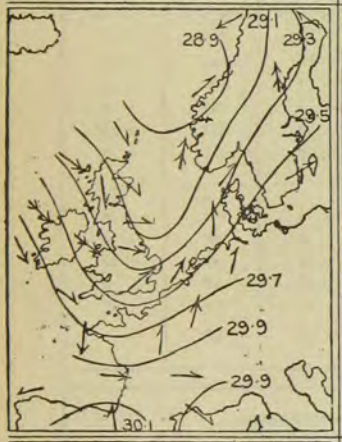
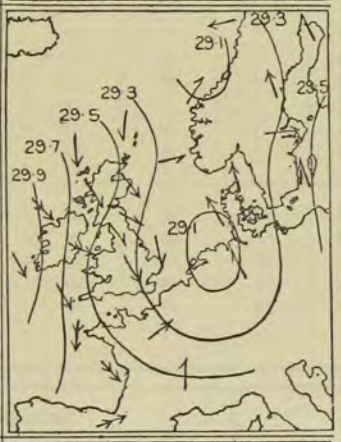
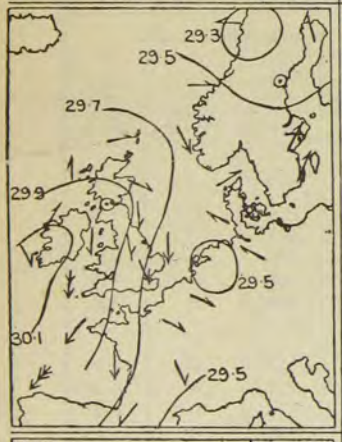
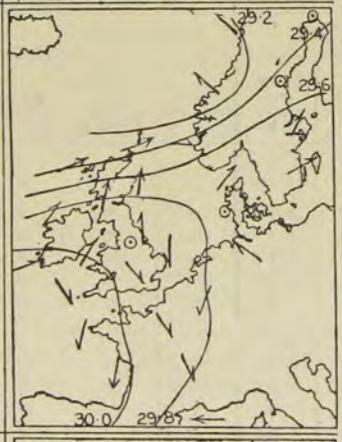
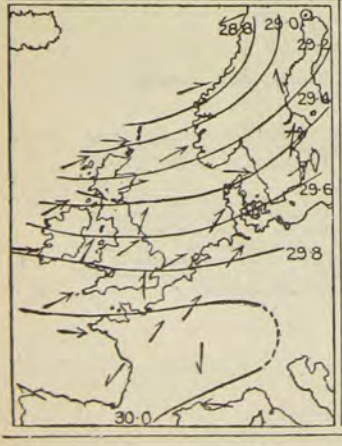
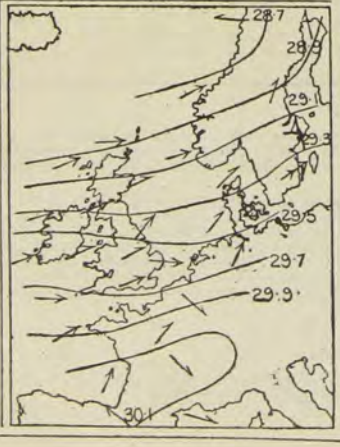
Bright sunshine does not differ materially from that reported last week, the percentages of the possible amount of duration ranging from 4 in "Scotland, N." and 8 in "Ireland, N." to 17 in "Scotland, W." and "Ireland, S.", and to 37 in the "Channel Islands."

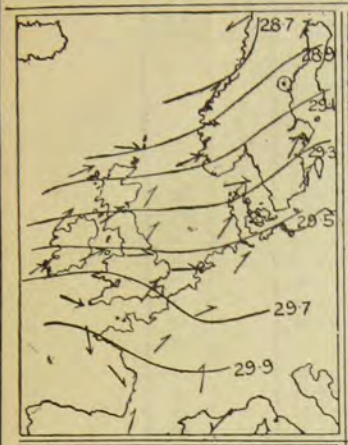
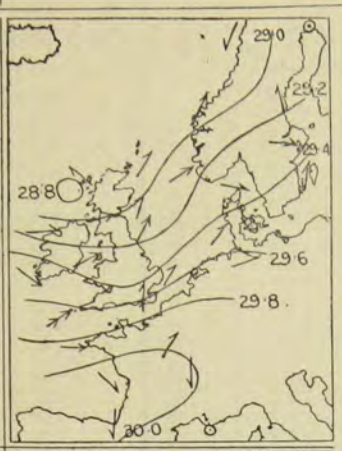
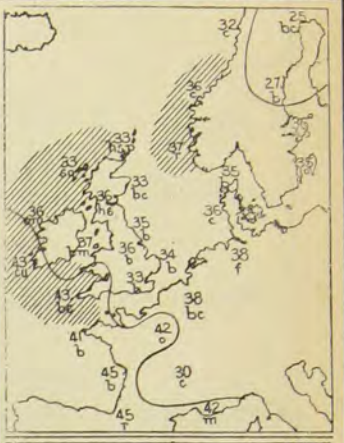
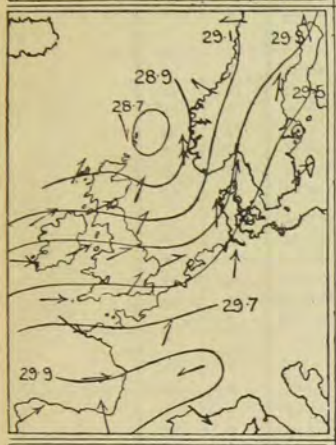
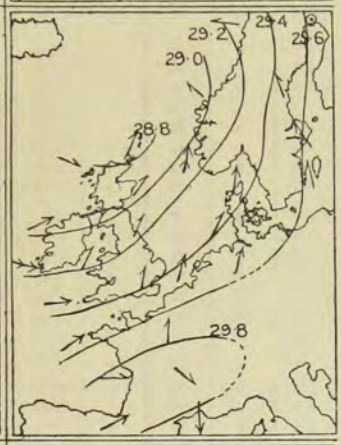
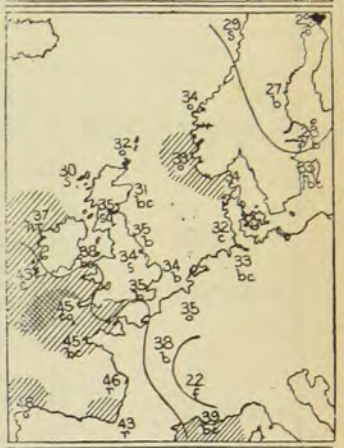
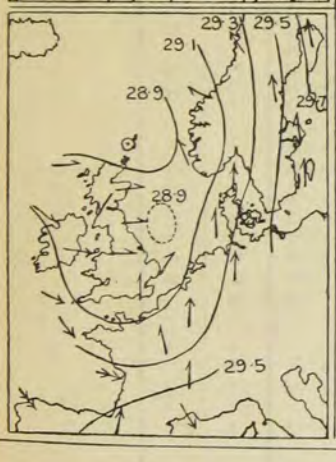
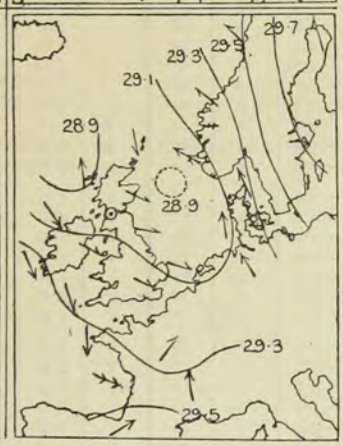
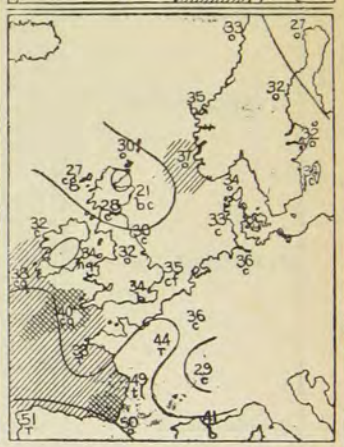
Depressions observed.—During the whole of this period depressions have travelled from west to east over the northern part of our area, while some subsidiary disturbances have passed over the United Kingdom. Towards the end of the week the barometer over our Islands was very low, the readings over Scotland and the greater part of England being below 29 ins. Westerly to North-Westerly or Northerly winds were most prevalent on our coasts and were generally moderate or fresh in force, but at times they increased to a squally gale, which in a few localities blew with exceptional violence.

* The values in this district are liable to alteration owing to the non-arrival of the Return from Foynes.
† This value has been altered slightly owing to the receipt of some arrears of observations.

E 20458. 350.—1/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, January 12.** *Weather* fine in the south of England and also in the north and east of France, but cloudy elsewhere, with rain or snow in the extreme north and north-west. Rain falling later in most parts of the Kingdom. *Temperature* fallen generally; readings ranging from 47° at Belmullet and Valencia to 29° at York, Oxford, and Cambridge. Brisk rise taking place later. *Wind* moderate South-Easterly or Southerly on the eastern shores of the North Sea and North-Westerly over England, but Westerly or South-Westerly in Ireland and Scotland. Subsequently backing to South-West over England. *Sea* rather rough off the east of England as well as at Sumburgh Head and Scilly. *Barometer* falling at our western, northern, and the Scandinavian stations, but rising elsewhere. Anticyclone lying off our south-west coasts, with large depression off the west of Norway. Fall taking place generally later.	
		**Wednesday, January 13.** *Weather* fair over the greater part of Scotland, but cloudy or overcast elsewhere, with rain on our south and south-east coasts and passing showers in the west. Some improvement taking place in south later, but hail showers falling in west and north. *Temperature* fallen a little in the extreme west and north-west, but risen over England; readings ranging from 51° at Scilly to 35° at Nairn. Frost in Scotland at night. *Wind* moderate South-Westerly over our eastern and south-eastern counties, but strong Southerly on the eastern shores of the North Sea and strong to gale from North-West on our west and north-west coasts. North-Westerly winds subsequently becoming general. *Sea* rough in the west and south-west; moderate to smooth elsewhere. *Barometer* falling at all but the southern French stations. Pressure highest in the south of France, with a large depression off the west of Norway and a subsidiary disturbance over the North Sea. Both depressions moving away later, and rise taking place over our Islands.	
		**Thursday, January 14.** *Weather* dull in Scandinavia, the east of France, and the north-west of our Islands, but fine elsewhere. Rain falling later in the west and north-west. *Temperature* fallen generally; readings ranging from 45° at Valencia to 31° at Ardrossan. Frost occurring over England at night. *Wind* moderate from South-West or South on our extreme north-west coasts, but strong from North in most other localities. Subsequently backing to South-West at all our more northern stations. *Sea* rough in the south and east, but moderate to smooth elsewhere. *Barometer* rising on all but our extreme north-west coasts. Pressure highest over the south of Ireland, with depression over the Netherlands and north of Scandinavia. Large disturbance appearing in north later, and barometer falling at all our western and northern stations.	
		**Friday, January 15.** *Weather* fine in the east of Scotland and some parts of Ireland, but cloudy or overcast elsewhere, with snow showers in the extreme north and hail in the north-west. Rain falling later in the south-east of England. *Temperature* risen generally; readings ranging from 49° at Roche's Point to 34° at Wick. Frost occurring at night in most parts of the Kingdom. *Wind* South-Westerly or Westerly, strong in force at some of our western and northern stations. Subsequently increasing to gale in the north of Ireland. *Sea* rough in the extreme north-west, but moderate to smooth elsewhere. *Barometer* falling at all but the French stations. Pressure highest over France, with a large depression to the northward of our Islands. Subsidiary disturbances subsequently appearing over Ireland and England.	

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, January 16.** *Weather* fine in most parts of our Islands, but snow falling in the north of Scotland and hail on our extreme north-west coasts. Rain or sleet falling later in all parts of the Kingdom and thunderstorms occurring at several of our western and southern stations. *Temperature* fallen several degrees; readings ranging from 43° at Valencia and Scilly to 30° at Wick. Frost occurring at night in many places. *Wind* South-Westerly or Westerly; strong in force at several of our western and northern stations. Subsequently increasing to fresh or strong gale in west and south. *Sea* rough at Valencia and Scilly and rather rough on our west coasts generally. *Barometer* rising at all but the French stations. Distribution of pressure in morning similar to that of previous day, but new depression appearing off west of Scotland later and subsidiary disturbance passing over Ireland and England.	
		**Sunday, January 17.** *Weather* fine in the eastern and southern parts of Great Britain, but cloudy or overcast elsewhere, with snow or hail in the west and north-west of our Islands, and rain in the south-west of France. Rain falling over England later. *Temperature* changed little and irregularly; readings ranging from 45° at Scilly to 30° at Stornoway. Sharp frost occurring in Scotland at night, lowest minima being 18° at Wick and 19° at Nairn and Aberdeen. *Wind* strong to a gale from South on the eastern shores of the North Sea, but South-Westerly or Westerly elsewhere. Subsequently increasing to slight gale on our Channel coasts. *Sea* high at Scilly, and rough on our south-west and west coasts generally. *Barometer* falling at all but the Swedish stations. Pressure still highest in the south of France, with well marked depression near the Shetlands. Subsidiary disturbances appearing over Ireland and England later.	
		**Monday, January 18.** *Weather* fair at many of our northern and eastern stations, but cloudy elsewhere, with snow in Ireland and rain in the west and north of France. Snow or hail falling later at many of our western and northern stations. *Temperature* fallen in our Islands, but risen at the continental stations; readings over the United Kingdom ranging from 40 at Scilly and Hurst Castle, to 20° at Wick and Nairn. Hard frost occurring over Great Britain at night, the lowest minima being 8° at Wick, 12° at Nairn and Leith, 14° at Cambridge, and 16° at York. *Wind* strong from South on the eastern shores of the North Sea, but moderate South-Westerly on our south-east coasts, and Westerly or North-Westerly in the west and north. North-Westerly breezes subsequently becoming general. *Sea* rough in the extreme west and south-west; slight or smooth elsewhere. *Barometer* rising at our western, northern, and the Scandinavian stations, but falling in all other localities. Relatively high pressures reported in Sweden and the south of France, with shallow depressions over the North Sea. New disturbance appearing off north-west of Scotland later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 9 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	45	25	39·1	30·3	34·9	− 4·3	0	50	7	1·55	+0·70	*	*
	Stornoway	46	20	39·0	29·7	34·5	− 4·3	0	53	7	1·70	+0·52	2	4
	Wick	44	18	37·6	28·6	33·3	− 4·9	0	61	6	0·81	+0·36	*	*
1. SCOTLAND, E.	Nairn	47	19	38·7	29·3	34·2	− 3·1	0	55	5	0·73	+0·27	*	*
	Aberdeen	44	19	38·4	29·9	34·3	− 2·9	0	54	3	0·17	−0·36	16	32
	Leith	48	26	40·0	31·7	36·0	− 1·5	0	42	5	0·73	+0·28	*	*
2. ENGLAND, N.E.	Alnwick Castle	46	18	39·3	30·3	35·0	− 2·2	0	49	5	0·33	−0·16	*	*
	Durham	47	24	39·8	30·6	35·4	− 1·8	0	46	5	0·32	−0·16	20	38
	Shields	48	29	42·0	32·1	37·3	− 0·8	0	33	3	0·36	−0·04	*	*
	Scarborough ℻	47	23	39·5	33 0	36·4	− 1·3	0	39	4	0·91	+0·49	*	*
	York	47	28	42·6	31·7	37·4	− 0·4	2	38	5	0·47	+0·05	7	13
	Spurn Head	44	31	40·6	33·3	37·2	− 1·5	0	34	6	0·37	?	*	*
3. ENGLAND, E.	Hillington ℻	46	29	39·6	31·1	35·5	− 1·2	0	46	6	0·83	+0·41	16	29
	Yarmouth	47	31	40·4	32·3	36·5	− 1·7	0	39	6	0·72	+0·24	*	*
	Geldeston	45	29	40·8	31·9	35·5	− 1·5	0	39	5	0·53	+0·18	12	21
	Cambridge	44	28	41·1	30·7	36·1	− 1·1	0	41	4	0·58	+0·23	16	29
	Rothamsted	41	27	35·3	30·7	33·1	− 4·1	0	62	5	0·90	+0·28	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	50	28	42·7	31·1	37·1	− 1·2	2	40	5	0·49	+0·07	15	27
	Loughborough	47	30	42·9	32·3	37·9	+ 0·7	3	37	6	0·59	+0·11	*	*
	Leicester	47	29	40·7	31·9	36·5	− 0·5	0	39	6	0·78	+0·33	13	24
	Cheadle ℻	45	26	38·9	29·6	34·4	− 2·3	0	53	7	1·27	+0·66	*	*
	Churchstoke ℻	48	21	41·9	31·1	36·7	− 1·2	0	37	7	1·48	+0·83	16	29
	Hereford ℻	49	29	45·1	31·1	38·4	+ 0·4	9	42	5	0·72	+0·11	*	*
	Cirencester	46	28	42·6	?31·3	?37·2	?− 1·0	2	40	5	1·19	+0·42	25	45
	Oxford	47	29	43·1	32·3	37·9	− 0·7	3	36	5	1·14	+0·62	24	43
5. ENGLAND, S.	London†	48	30	43·0	32·0	37·7	− 0·7	3	37	5	0·96	+0·46	11	19
	Strathfield Turgiss ℻	47	27	43·3	30·7	37·3	− 0·9	4	43	5	1·03	+0·43	*	*
	Dungeness	45	30	44·4	33·6	39·2	− 0·7	7	32	5	1·38	+0·77	*	*
	Hastings (St. Leonard's)	46	30	42·9	31·9	37·6	− 1·9	3	37	5	1·37	+0·72	21	36
	Southampton	49	30	44·5	31·6	38·3	− 0·4	7	40	5	1·04	+0·24	25	43
	Hurst Castle	47	30	45·6	32·4	39·3	− 1·2	10	38	5	0·87	+0·17	*	*
	Stowell ℻	48	29	44·6	31·6	38·4	− 2·3	7	40	5	1·14	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	49	17	43·7	30·6	37·4	− 1·8	5	43	7	?	?	*	*
	Glasgow	49	19	43·1	29·5	36·6	− 1·6	3	47	6	0·89	−0·13	9	17
	Ardrossan	48	27	41·1	32·1	36·8	− 2·4	0	40	7	1·00	−0·01	*	*
	Douglas (Isle of Man)	49	30	43·1	34·7	39·1	− 1·3	3	28	7	1·05	−0·08	9	17
7. ENGLAND, N.W.	Newton Reigny (Penrith)	46	15	39·3	28·7	34·3	− 2·9	0	54	5	1·42	+0·54	14	26
	Barrow-in-Furness	45	32	41·4	34·3	38·0	− 2·1	0	28	5	0·86	−0·04	*	*
	Stonyhurst	45	20	40·2	31·0	35·8	− 2·5	0	43	5	1·94	+0·99	12	22
	Blackpool ℻	45	31	41·5	34·0	37·9	− 2·3	0	29	6	1·18	+0·48	9	17
	Manchester	46	22	39·5	31·1	35·5	− 3·2	0	46	6	1·73	+0·98	*	*
	Liverpool Obsy (Bidston)	48	30	42·6	34·1	38·5	− 0·7	2	29	7	1·33	+0·83	*	*
	Llandudno ℻	47	32	43·9	36·0	40·1	− 1·2	5	23	6	0·93	+0·27	6	11
	Holyhead	49	30	42·7	33·7	38·4	− 4·0	2	31	7	0·87	+0·08	*	*
8. ENGLAND, S.W.	Llandovery	50	22	44·4	27·9	36·5	− 3·2	7	53	7	1·85	+0·60	*	*
	Pembroke	49	36	45·3	38·1	41·8	− 0·6	9	17	7	0·77	−0·13	12	21
	Arlington (N. Devon)	48	30	43·7	32·9	38·5	− 1·7	5	34	7	2·05	+1·07	*	*
	Cullompton ℻	49	29	45·0	31·6	38·6	− 2·4	8	41	6	1·35	+0·56	16	28
	Falmouth	51	33	46·5	36·8	41·8	− 1·5	13	22	7	1·17	−0·13	21	36
	Plymouth	50	30	47·1	33·3	40·5	− 1·9	14	36	6	0·65	−0·27	19	32
	Prawle Point	48	30	45·6	32·7	39·4	− 2·6	10	37	6	1·03	?	*	*
9. IRELAND, N.	Malin Head	48	30	42·4	34·9	38·8	− 1·4	1	26	6	1·32	?	*	*
	Londonderry	51	26	45·0	32·5	39·0	− 2·0	8	37	7	2·49	+1·59	*	*
	Mullaghmore	48	31	43·0	37·4	40·3	− 2·1	3	18	7	1·90	+1·08	*	*
	Belmullet	48	28	43·4	35·7	39·7	− 4·8	4	24	7	1·84	?	*	*
	Markree Castle	49	24	43·5	31·3	37·6	− 4·5	4	40	7	1·50	+0·72	3	6
	Brookeborough	48	24	42·2	31·4	37·0	− 3·2	1	39	7	1·66	?	*	*
	Armagh	48	24	42·0	31·1	36·8	− 2·7	0	36	7	1·59	+0·91	5	9
	Donaghadee	48	26	41·4	33·3	37·5	− 3·0	0	32	5	0·86	+0·18	*	*
	Edgeworthstown	49	24	40·4	30·6	35·7	− 3·5	0	41	6	1·06	+0·39	*	*
10. IRELAND, S.	Dublin	50	29	44·0	33·5	39·0	− 1·6	6	33	7	0·48	−0·01	14	25
	Parsonstown	50	24	42·6	31·4	37·2	− 2·8	2	39	7	1·33	+0·63	7	13
	Kilkenny	51	25	43·6	32·0	38·0	− 1·4	4	38	4	0·86	+0·05	*	*
	Waterford	51	27	43·6	32·6	38·3	− 3·0	4	35	5	0·38	−0·71	*	*
	Roche's Point	53	31	46·3	36·1	41·4	− 1·4	12	25	7	0·67	−0·61	*	*
	Valencia	52	33	47·7	39·4	43·7	− 1·5	23	7	7	1·65	+0·13	7	13
	Killarney	52	27	47·3	33·8	40·8	− 2·5	15	34	7	2·13	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	35	47·9	40·6	44·4	− 1·8	23	4	7	0·73	−0·17	*	*
	Jersey (Noirmont)	49	36	45·4	38·1	41·9	− 0·3	10	17	6	1·45	+0·70	22	37

Stations marked ℻ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 4.] *New Series.* WEEK ENDING MONDAY, 25TH JANUARY, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day degrees—a "Day degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 16.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	43	8	40·1	31·5	36·0	3 below.	0	42	5	− 16	196	+ 53
	1. SCOTLAND, EAST	40	12	37·8	26·8	32·6	5 below.	0	66	11	− 11	218	+ 37
	2. ENGLAND, N.E.	40	13	36·6	28·1	32·5	6 below.	0	67	12	− 9	204	+ 37
	3. ENGLAND, EAST	39	14	35·6	26·9	31·4	6 below.	0	74	12	− 12	226	+ 44
	4. MIDLAND COUNTIES	42	14	35·2	26·1	30·9	7 below.	0	78	18	− 15	214	+ 32
	5. ENGLAND, SOUTH	45	23	37·6	28·1	33·1	7 below.	0	62	30	− 5	173	+ 27
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	40	20	37·2	28·0	32·8	7 below.	0	64	23	− 8	169	+ 27
	7. ENGLAND, N.W.	41	7	36·1	26·7	31·6	8 below.	0	73	20	− 9	174	+ 31
	8. ENGLAND, S.W.	43	14	37·2	27·3	32·4	9 below.	0	67	34	− 27	147	+ 58
	9. IRELAND, NORTH	44	14	38·5	28·9	33·9	7 below.	0	57	24	− 21	137	+ 16
	10. IRELAND, SOUTH *	45	18	37·5	27·9	32·9	9 below.	0	64	39	− 35	138	+ 50
	— CHANNEL ISLANDS	47	27	41·5	34·3	38·0	6 below.	0	28	61	− 15	55	+ 4

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 16.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.							
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	6	2 less.	27	+ 8	5·1	+ 1·7	5	10	18	− 8	9	− 4
	1. SCOTLAND, EAST	7	8	3 more.	20	+ 8	2·4	+ 0·4	4	8	41	− 7	21	− 3
	2. ENGLAND, N.E.	6	15	10 more.	19	+ 6	2·9	+ 1·0	3	6	31	+ 3	15	+ 2
	3. ENGLAND, EAST	6	7	3 more.	22	+ 8	2·7	+ 0·9	11	18	54	+13	24	+ 6
	4. MIDLAND COUNTIES	6	9	3 more.	21	+ 8	3·1	+ 0·8	7	11	46	+14	21	+ 7
	5. ENGLAND, SOUTH	6	6	1 less.	21	+ 8	3·4	+ 0·8	8	14	50	+17	22	+ 8
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	3	7 less.	22	+ 7	4·4	+ 0·2	3	5	35	+ 6	17	+ 3
	7. ENGLAND, N.W.	4	4	4 less.	21	+ 7	4·2	+ 1·1	8	14	33	+ 1	15	0
	8. ENGLAND, S.W.	5	12	2 more.	23	+ 8	4·3	+ 0·2	12	19	49	+ 8	21	+ 3
	9. IRELAND, NORTH	4	6	2 less.	21	+ 4	4·1	+ 1·1	8	13	25	−17	12	− 7
	10. IRELAND, SOUTH *	3	6	4 less.	18	+ 2	2·9	− 0·9	14	24	39	−11	18	− 5
	— CHANNEL ISLANDS	6	6	2 less.	26	+10	3·1	− 0·2	13	21	59	+ 3	25	+ 1

General Remarks.

Weather has again been in an unsettled and changeable condition. Falls of cold rain, sleet, and snow have been very general, and in some districts (notably over our south-western counties on the 25th) the snowfall was unusually large.

Temperature has continued below the mean in all parts of the Kingdom, the deficit ranging from 3° in "Scotland, N." and 5° in "Scotland, E." to as much as 7° or 8° over the greater part of England and in "Ireland, N.", and to 9° in the south-west of England and in "Ireland, S." During the earlier part of the period the minima in some localities were extremely low; in "England, N.W." (at Newton Reigny) the thermometer in the screen fell to 7°, in "Scotland, N." (at Wick) to 8°, and in most other districts to between 12° and 14°. In "Scotland, W.", however, the lowest reading was 20°, in "England, S." 23°, and in the "Channel Islands" 27°. The maxima, which were generally registered towards the end of the week, ranged from 39° in "England, E." to 45° in "England, S." and "Ireland, S.", and 47° in the "Channel Islands".

Rainfall has been less than the mean in all the "Grazing" districts excepting "England, S.W." and more in most of the "Wheat-producing" districts.

Bright sunshine has been less prevalent than it was last week, the percentages of the possible amount of duration varying between 5 in "Scotland, W.", 6 in "England, N.E.", 21 in the "Channel Islands", and 24 in "Ireland, S."

Depressions observed.—Several depressions have appeared in our Islands during this period, and with the exception of a well defined one, which on the 19th had reached the south-west of England from the north-north-westward, they approached our coasts from the eastward. Pressure was generally highest over Scandinavia and our northern coasts, and the wind over our Islands (excepting at the opening of the period) between east and north-east. Strong Northerly gales were experienced over Ireland on the 19th, and a fresh Easterly gale on the 24th in Scotland, but on other days the wind was moderate or fresh.

* The values in this district are liable to some alteration owing to the non-arrival of the Return from Foynes.

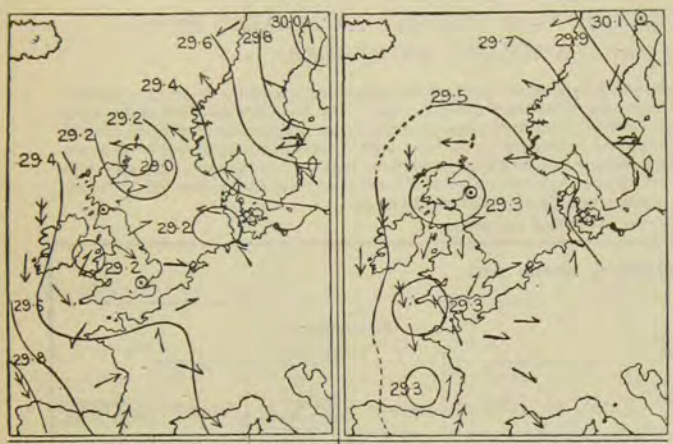
E 20553. 350.—1/86. Wt. 58. E. & S.

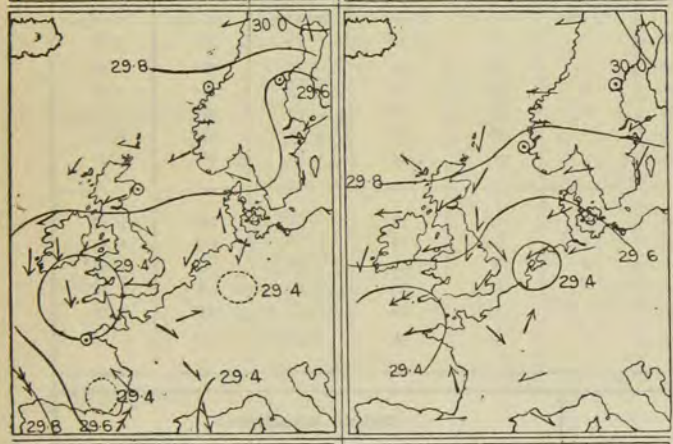
II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

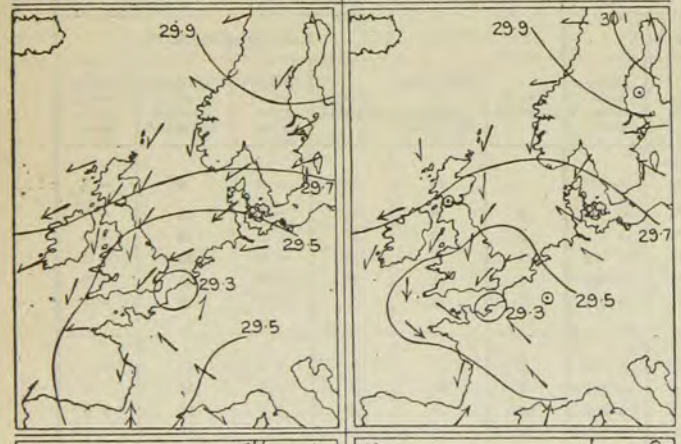
Synoptic Charts.

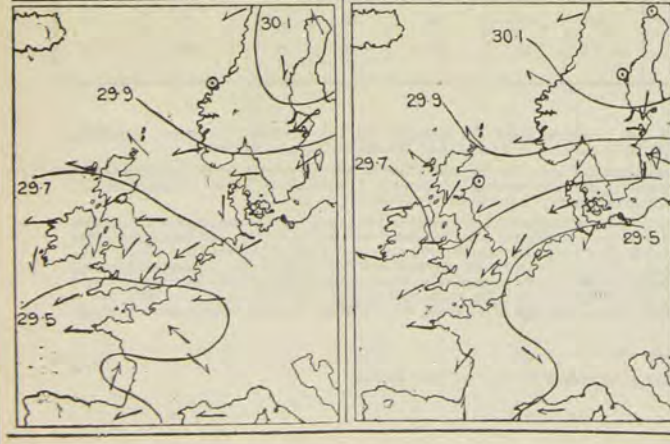
PRESSURE AND WIND.

8 a.m.	6 p.m.









Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Tuesday, January 19.

Weather fair at our eastern and southern stations, but unsettled in the west and north, with snow or cold rain in several places. Snow falling later at some of our eastern stations.

Temperature fallen several degrees over England and France, but risen in Ireland and Scotland; readings ranging from 42° at Valencia to 18° at York. Sharp frost occurring at night, the lowest minima being 7° at Newton Reigny, 16° at York, 17° at Leith, and 22° at Shields.

Wind fresh South-Easterly in Scandinavia and Denmark, but moderate North-Westerly in Scotland, strong Northerly in Ireland, and light Westerly on our southern coasts. Strong Northerly gale experienced later at several of our western and north-western stations.

Sea rough in the extreme west and south-west; slight or smooth elsewhere.

Barometer rising in most places. Distribution of pressure very irregular, readings being high over the Gulf of Bothnia and north-west of Spain, with a well-marked depression near Holstein, another off the north-east of Scotland, and a third over the Irish Sea. Two first-mentioned disturbances subsequently dispersing, but third moving steadily southwards.

Wednesday, January 20.

Weather fair in most places, but snow or hail showers reported in the south-west of England. Snow falling in east of England at night.

Temperature fallen a little in France and the west of our Islands, but risen elsewhere; readings ranging from 42° at Valencia to 20° at York. Frost occurring in most places at night, lowest reading being 19° at Parsonstown.

Wind Easterly or North-Easterly on our northern coasts and Northerly in the south of Ireland, but South-Easterly in the Channel and North-Westerly in the east of France; strong in force in the south of Ireland, but light or moderate elsewhere. Subsequently backing to East or North-East on the Channel coasts.

Sea rough on our south-west coasts and also off the north of Scotland; moderate to smooth elsewhere.

Barometer rising at all but the French stations. Pressure still high in the north of Sweden and north-west of Spain, with depression over the Netherlands, the south-west of England, and the Bay of Biscay. First of these disturbances subsequently moving westwards towards the east of England.

Thursday, January 21.

Weather fair in the west of Norway and south of Ireland, but cloudy elsewhere, with snow or rain at many of the English and Irish stations.

Temperature risen several degrees over the northern and eastern parts of Great Britain, but fallen in the south-west; readings ranging from 40° at Malin Head to 29° at Prawle Point. Frost occurring in many places at night.

Wind light North-Westerly over the Channel and variable in France, but moderate Easterly or North-Easterly elsewhere.

Sea rather rough off the east of England and also at Scilly.

Barometer falling at all but our extreme western stations. Pressure still highest in the north of Sweden, with well-marked depressions off the south-east of England and west of France. Slight rise taking place over England later.

Friday, January 22.

Weather fine over central and south-eastern England, but cloudy or overcast in most other localities, with showers of sleet, hail, or cold rain on our north-east coasts. Snow falling at night over Denmark, the Netherlands, and our south-eastern counties.

Temperature risen on our south and south-east coasts, but fallen elsewhere; readings ranging from 43° at Scilly to 30° at Loughborough, Oxford, and Cambridge. Frost occurring in many places at night.

Wind South-Easterly in Scotland and variable over the central parts of France, but Easterly or North-Easterly elsewhere; light or moderate in force generally.

Sea rough off the east of England.

Barometer falling a little on our extreme north and north-west coasts, as well as in the west of France, but rising elsewhere. Pressure still highest over the north of Sweden, with large but shallow area of low pressure over the Channel and North of France. Depression subsequently advancing from the eastward over Germany and the Netherlands.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

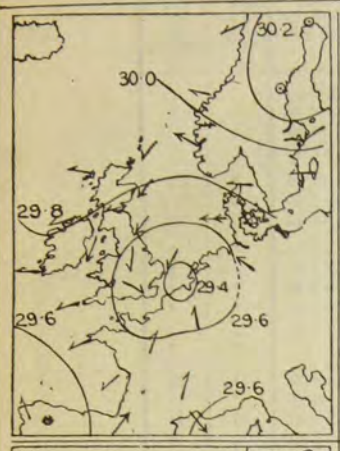
Weather

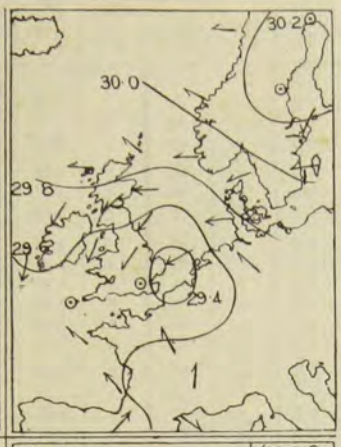
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, January 23.

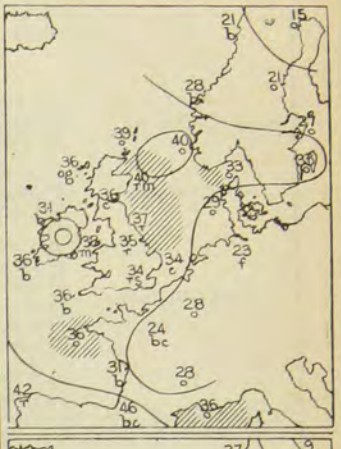
Weather fine in Ireland, the south-west of England, and the west of France, but cloudy elsewhere, with rain on our north-east coasts and snow over the midland and southern counties. Snow afterwards changing to sleet or cold rain.

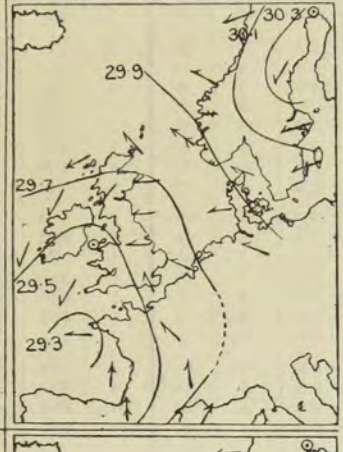
Temperature fallen a little on all but our northern coasts; readings ranging from 40° at Wick and Aberdeen to 19° at Parsonstown. Frost occurring at night in most parts of the Kingdom.

Wind light North-Westerly at our central and southern stations, and variable over France, but Easterly or North-Easterly elsewhere; fresh in force on our east and north-east coasts.

Sea rough in the north-east, but moderate to smooth in all other localities.

Barometer falling over the greater part of England, but rising elsewhere. Pressure highest Gulf of Bothnia, with well marked depression lying off the east of England. Fall becoming general late, but depression slowly dispersing.





Sunday, January 24.

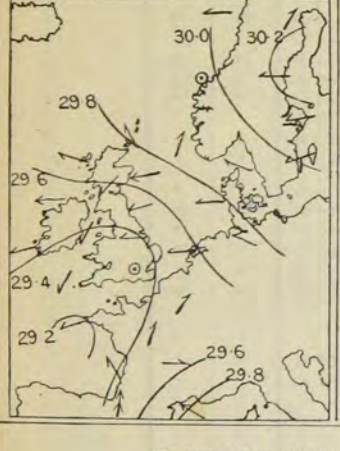
Weather cloudy or overcast at all but the Irish stations, with snow or hail in many parts of Great Britain as well as in the south of Scandinavia.

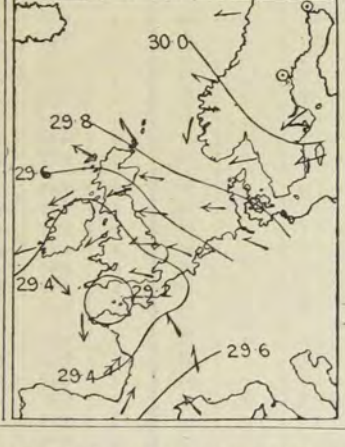
Temperature risen over the southern parts of our Islands and France, but changed irregularly elsewhere; readings ranging from 40° at Scilly to 29° at Loughborough and Parsonstown. Frost occurring during the evening or night in most places.

Wind Southerly or South-Easterly at our southern and the French stations, but Easterly in the east and North-Easterly in the west; blowing with the force of a gale or strong breeze in the east of Scotland.

Sea very high at Aberdeen and rough off the east of England, but moderate to smooth elsewhere.

Barometer falling in nearly all parts of Western Europe. Pressure still highest over Gulf of Bothnia, with area of low readings over the Bay of Biscay and our south-west coasts. Rise taking place in east later.





Monday, January 25.

Weather cloudy or overcast generally, with sleet or cold rain in many parts of the United Kingdom, and fog in London and at Oxford.

Temperature fallen a little on our north and north-west coasts, but risen elsewhere: readings ranging from 43° at Jersey to 29° at Parsonstown.

Wind light North-Easterly on our south-west coasts, but moderate to strong Easterly or South-Easterly elsewhere. Easterly wind subsequently increasing to gale on our north-east coasts.

Sea rough on the east coast of Scotland, and rather rough off the east of England; moderate to smooth elsewhere.

Barometer falling generally. Pressure still highest over Gulf of Bothnia, with small depression off the north-west of France. Depression subsequently moving slowly north-eastwards, but barometer rising in north of Scotland.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 13 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	42	26	40·6	33·1	37·0	− 2·2	0	35	7	0·33	−0·50	*	*
	Stornoway	43	27	40·3	32·0	36·5	− 2·2	0	39	5	0·58	−0·60	5	10
	Wick	41	8	39·3	29·4	34·6	− 3·6	0	52	7	0·83	+0·38	*	*
1. SCOTLAND, E.	Nairn	39	12	37·0	25·3	31·4	− 6·3	0	74	7	0·83	+0·38	*	*
	Aberdeen	40	17	39·1	29·0	34·3	− 3·0	0	54	6	0·68	+0·13	4	8
	Leith	39	12	37·4	26·1	32·0	− 5·8	0	70	7	0·89	+0·44	*	*
2. ENGLAND, N.E.	Alnwick Castle	38	17	36·1	29·3	32·8	− 4·6	0	64	6	1·70	+1·21	*	*
	Durham	37	13	35·5	25·8	30·8	− 6·6	0	78	6	2·43	+1·96	4	7
	Shields	40	22	38·0	28·4	33·3	− 5·0	0	61	6	1·20	+0·80	*	*
	Scarborough ℳ	39	22	36·8	30·2	33·6	− 4·3	0	59	6	1·49	+1·06	*	*
	York	40	16	36·1	24·7	30·6	− 7·5	0	80	6	1·32	+0·88	2	4
	Spurn Head	39	27	37·3	30·3	33·9	− 4·8	0	57	6	0·67	?	*	*
3. ENGLAND, E.	Hillington ℳ	37	21	35·6	26·4	31·2	− 5·8	0	76	7	0·85	+0·42	11	19
	Yarmouth	38	25	36·0	29·3	32·8	− 5·9	0	64	6	0·59	+0·11	*	*
	Geldeston	39	24	36·4	28·1	32·4	− 6·0	0	67	5	0·74	+0·38	10	17
	Cambridge	39	14	36·3	24·3	30·5	− 7·2	0	81	6	0·63	+0·28	11	19
	Rothamsted	37	22	33·5	26·5	30·1	− 7·3	0	83	7	0·68	+0·05	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	39	14	37·4	22·6	30·3	− 8·2	0	82	5	1·16	+0·73	2	3
	Loughborough	37	24	35·3	27·4	31·5	− 6·2	0	74	7	0·87	+0·39	*	*
	Leicester	37	25	35·3	29·1	32·3	− 4·9	0	68	5	0·81	+0·36	5	9
	Cheadle ℳ	35	22	33·4	24·9	29·3	− 7·4	0	89	7	0·60	+0·07	*	*
	Churchstoke ℳ	36	20	33·9	22·8	28·6	− 9·6	0	94	6	1·28	+0·62	5	9
	Hereford ℳ	42	25	36·5	28·0	32·4	− 6·0	0	67	7	0·97	+0·35	*	*
	Cirencester	37	22	34·4	26·4	30·6	− 7·7	0	80	6	0·72	−0·05	12	20
	Oxford	40	23	35·6	27·7	31·8	− 7·1	0	71	7	0·63	+0·11	9	15
5. ENGLAND, S.	London†	41	23	36·6	28·4	32·7	− 6·0	0	65	6	0·64	+0·14	1	2
	Strathfield Turgiss ℳ	41	24	36·3	26·9	31·8	− 6·4	0	71	6	0·63	+0·04	*	*
	Dungeness	45	25	39·6	28·1	34·1	− 6·1	0	55	5	0·24	−0·35	*	*
	Hastings (St. Leonard's)	40	26	36·6	28·8	32·9	− 6·9	0	64	6	0·48	−0·15	13	22
	Southampton	44	25	37·7	28·5	33·3	− 5·6	0	61	7	0·76	−0·04	10	17
	Hurst Castle	45	25	40·4	28·6	34·7	− 5·9	0	51	7	0·51	−0·18	*	*
	Stowell ℳ	41	23	36·1	27·5	32·0	− 9·1	0	70	7	0·59	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	40	20	37·6	27·4	32·7	− 6·5	0	65	2	0·03	−1·89	*	*
	Glasgow	38	20	36·3	26·2	31·5	− 6·9	0	74	4	0·23	−0·79	0	0
	Ardrossan	38	24	37·4	28·4	33·1	− 6·2	0	62	3	0·17	−0·83	*	*
	Douglas (Isle of Man)	39	24	37·3	29·9	33·8	− 6·6	0	57	6	0·73	−0·37	5	9
7. ENGLAND, N.W.	Newton Reigny (Penrith)	38	7	33·3	20·7	27·3	− 9·9	0	103	4	0·27	−0·60	15	27
	Barrow-in-Furness	41	25	37·3	29·4	33·5	− 6·7	0	60	3	0·11	−0·77	*	*
	Stonyhurst	38	16	35·5	26·0	30·9	− 7·5	0	78	5	0·55	−0·40	10	18
	Blackpool ℳ	40	15	36·2	25·0	30·8	− 9·6	0	78	3	0·07	−0·61	3	5
	Manchester	36	20	34·5	27·2	31·0	− 7·7	0	77	5	0·36	−0·35	*	*
	Liverpool Obs? (Bidston)	39	25	35·7	29·1	32·5	− 7·4	0	67	5	0·40	−0·09	*	*
	Llandudno ℳ	39	25	37·6	27·8	32·9	− 8·7	0	64	4	0·68	+0·04	4	7
	Holyhead	41	26	38·4	28·4	33·6	− 8·9	0	59	6	0·73	−0·03	*	*
8. ENGLAND, S.W.	Llandovery	38	20	35·4	24·6	30·2	− 9·8	0	83	3	0·73	−0·52	*	*
	Pembroke	40	27	38·1	30·9	34·6	− 8·0	0	52	5	1·15	+0·28	15	25
	Arlington (N. Devon)	36	22	34·9	27·0	31·1	− 9·1	0	76	4	1·36	+0·39	*	*
	Cullompton ℳ	59	14	55·8	24·7	30·5	−10·6	0	81	5	1·54	+0·75	6	10
	Falmouth	40	26	39·0	30·5	34·9	− 8·3	0	50	5	0·87	−0·42	13	21
	Plymouth	39	23	37·6	25·6	31·8	−10·8	0	71	5	1·16	+0·24	12	20
	Prawle Point	43	25	39·3	27·7	33·7	− 8·5	0	58	5	1·43	?	*	*
9. IRELAND, N.	Malin Head	44	30	41·3	33·6	37·6	− 2·6	0	31	6	0·48	?	*	*
	Londonderry	44	22	39·6	27·2	33·7	− 7·1	0	58	7	0·94	+0·04	*	*
	Mullaghmore	42	28	39·6	32·0	36·0	− 6·3	0	42	2	0·42	−0·41	*	*
	Belmullet	43	28	40·6	31·7	36·3	− 8·4	0	40	5	0·75	?	*	*
	Markree Castle	40	21	37·9	26·9	32·6	− 9·4	0	66	2	0·48	−0·29	8	14
	Brookeborough	40	14	36·8	21·4	29·5	−10·7	0	88	1	0·68	?	*	*
	Armagh	38	20	35·6	25·3	30·7	− 9·0	0	79	5	0·54	−0·13	7	12
	Donaghadee	41	29	39·6	34·0	36·9	− 3·7	0	36	3	0·52	−0·16	*	*
	Edgeworthstown	37	25	35·4	27·6	31·7	− 7·7	0	72	2	0·50	−0·16	*	*
10. IRELAND, S.	Dublin	40	26	37·6	30·4	34·1	− 6·6	0	55	7	1·95	+1·46	5	9
	Parsonstown	37	18	35·3	23·3	29·5	−10·5	0	88	3	0·55	−0·15	13	22
	Kilkenny	38	22	35·6	25·7	30·9	− 8·7	0	78	1	0·50	−0·31	*	*
	Waterford	38	23	35·3	26·5	31·1	−10·3	0	76	2	0·23	−0·87	*	*
	Roche's Point	42	29	40·3	31·3	36·0	− 7·0	0	42	2	0·09	−1·16	*	*
	Valencia	45	28	41·6	32·1	37·0	− 8·2	0	35	2	0·33	−1·17	24	41
	Killarney	40	20	36·7	25·7	31·4	−11·9	0	74	1	0·21	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	44	34	42·3	35·9	39·2	− 7·0	1	22	5	0·57	−0·30	*	*
	Jersey (Noirmont)	47	27	40·7	32·6	36·8	− 5·4	0	36	6	0·68	−0·02	13	21

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 5.] *New Series.* WEEK ENDING MONDAY, 1ST FEBRUARY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 20.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	44	22	39·5	32·1	35·9	3 below.	0	43	5	− 23	239	+ 69
	1. SCOTLAND, EAST	42	27	39·1	32·1	35·7	2 below.	0	44	11	− 19	262	+ 48
	2. ENGLAND, N.E.	42	28	38·1	32·0	35·2	3 below.	0	48	12	− 16	252	+ 50
	3. ENGLAND, EAST	45	24	40·5	31·5	36·2	2 below.	0	41	12	− 22	267	+ 47
	4. MIDLAND COUNTIES	47	29	40·4	32·5	36·6	2 below.	0	38	18	− 25	252	+ 33
	5. ENGLAND, SOUTH	48	28	44·8	34·7	39·9	0 (average).	8	29	38	− 7	202	+ 25
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	44	28	39·8	33·3	36·7	3 below.	0	37	23	− 16	206	+ 40
	7. ENGLAND, N.W.	46	28	39·7	33·0	36·5	4 below.	0	39	20	− 18	213	+ 42
	8. ENGLAND, S.W.	50	21	43·5	33·0	38·5	4 below.	4	34	38	− 39	181	+ 74
	9. IRELAND, NORTH	45	27	40·4	32·2	36·5	4 below.	0	39	24	− 34	176	+ 33
	10. IRELAND, SOUTH	49	24	42·5	33·4	38·1	4 below.	1	32	40	− 54	170	+ 67
	— CHANNEL ISLANDS	51	34	46·8	39·4	43·2	1 below.	19	7	80	− 17	62	+ 4

	DISTRICTS. (See p. 20.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	8	0 (average).	33	+ 9	5·9	+ 1·7	9	16	27	− 8	11	− 3
	1. SCOTLAND, EAST	5	5	0 (average).	25	+ 9	2·9	+ 0·4	15	27	56	− 4	22	− 1
	2. ENGLAND, N.E.	5	6	1 more.	24	+ 7	3·5	+ 1·2	9	16	40	+ 5	15	+ 2
	3. ENGLAND, EAST	4	3	1 less.	26	+ 8	3·0	+ 0·7	22	36	76	+22	27	+ 8
	4. MIDLAND COUNTIES	6	9	3 more.	27	+11	4·0	+ 1·1	14	24	60	+17	21	+ 6
	5. ENGLAND, SOUTH	5	8	2 more.	26	+10	4·2	+ 1·0	15	24	65	+21	22	+ 7
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	11	0 (average).	27	+ 7	5·5	+ 0·3	8	13	43	+ 8	16	+ 3
	7. ENGLAND, N.W.	6	10	3 more.	27	+ 9	5·2	+ 1·5	7	12	40	0	15	0
	8. ENGLAND, S.W.	6	15	6 more.	29	+10	5·8	+ 0·8	18	29	67	+12	23	+ 4
	9. IRELAND, NORTH	6	11	4 more.	27	+ 5	5·2	+ 1·4	10	16	35	−17	13	− 6
	10. IRELAND, SOUTH	5	11	1 more.	23	+ 2	4·0	− 0·8	14	24	53	−10	19	− 3
	— CHANNEL ISLANDS	7	10	3 more.	33	+13	4·1	0·0	18	28	77	+ 1	25	0

General Remarks.

Weather has continued in a very unsettled condition. Cold rain, sleet, and snow have been very general. Lightning was observed on a few occasions in different parts of the Kingdom, and in some places thunderstorms were experienced.

Temperature has been about equal to the mean in "England, S.", but below it in all other districts, the deficit ranging from 1° in the "Channel Islands" to 4° over Ireland and the western parts of England. The maxima, which were registered on different days in the various parts of the country, ranged from 42° in "Scotland, E." and "England, N.E." to 50° in "England, S.W." and to 51° in the "Channel Islands". The minima, which were also recorded on irregular dates, varied between 21° in "England, S.W.", 22° in "Scotland, N.", 29° in the "Midland Counties", and 34° in the "Channel Islands".

Rainfall has been about equal to the mean in Scotland, but rather more over Ireland and in most parts of England.

Bright sunshine shows an increase on that reported last week, the percentages of the possible duration ranging from 12 in "England, N.W." and 13 in "Scotland, W.", to 29 in "England, S.W." and 36 in "England, E."

Depressions observed.—At the commencement of the period an area of low pressure lay over the greater part of England and Ireland, while the barometer was highest over Scandinavia. Strong Easterly winds or gales were blowing over Scotland and the northern parts of England and Ireland, while at our more southern stations the wind was light and rather variable. By the 28th, however, this low pressure system had filled up, and during the remainder of the week a large depression from the Atlantic passed slowly over our northern coasts, while some subsidiary disturbances moved in an easterly direction over Ireland and England. Strong Southerly winds or gales consequently prevailed over our Islands as the depression approached, and strong Westerly to North-Westerly winds, occasionally increasing to a squally gale, as it disappeared to the eastward.

E 20664. 350.—2/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

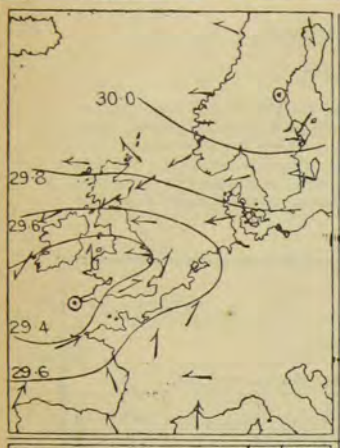
Weather

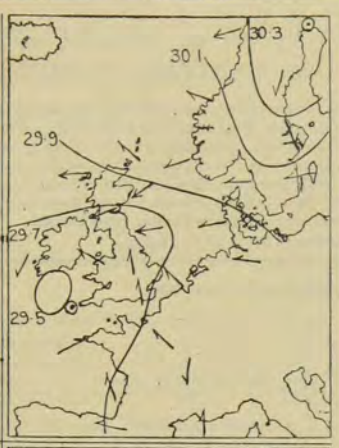
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, January 26.

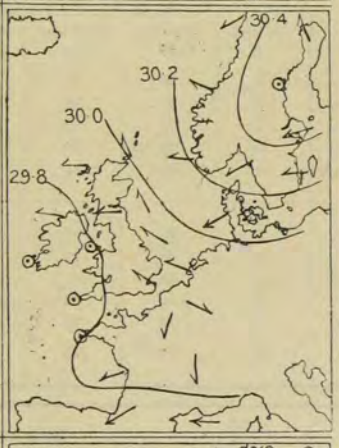
Weather fine at most of our southern stations, but cloudy or overcast elsewhere, with rain over the northern parts of England and Ireland. Rain or sleet falling later in most localities.

Temperature risen a little in the north, but fallen at our southern and the French stations; readings ranging from 41° at Donaghadee to 31° at Valencia and Roche's Point. Slight frost occurring at night in many places.

Wind strong Easterly in the north, but light from South-West in the south-east of England and moderate from South-East over the greater part of France.

Sea high at Aberdeen and Shields, rough on our north and north-east coasts generally, and rather rough off the north-west of France.

Barometer rising over our Islands and France, but falling on the eastern shores of the North Sea. Readings highest in the north of Scandinavia, with a large area of uniformly low readings over England and Ireland. Rise becoming general later.



Wednesday, January 27.

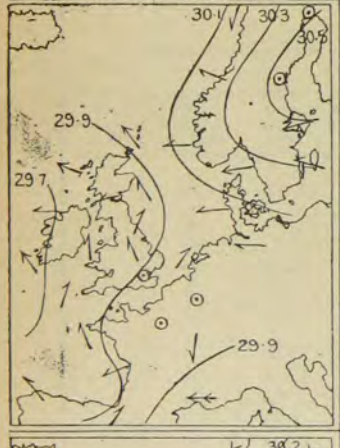
Weather fair at most stations, but fog reported locally; rain at Shields and in the north-west of France, and snow at Holyhead and Parsonstown. Sleet or rain falling later in many parts of the Kingdom.

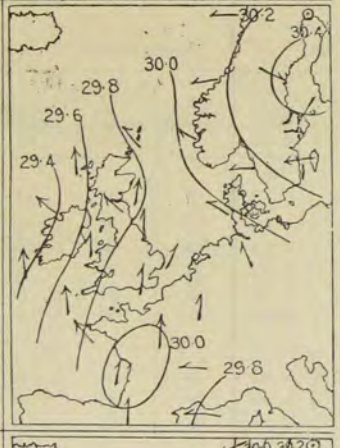
Temperature changed irregularly; readings ranging from 42° at Hurst Castle to 33° at Parsonstown. Frost occurring at night in many places.

Wind light from North in the south-west of our Islands, but Easterly or South-Easterly elsewhere; strong to a gale in the south of Norway.

Sea rough on our north-east coasts.

Barometer rising generally. Pressure highest over the Gulf of Bothnia, with area of relatively low readings over the Bay of Biscay and our south-west coasts. Rise continuing all day.





Thursday, January 28.

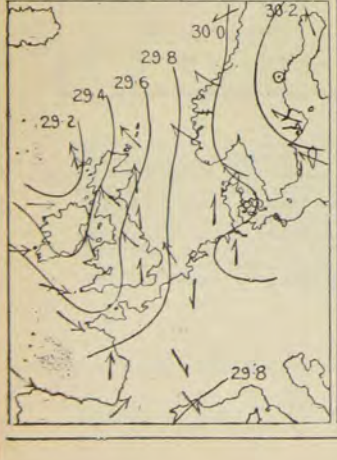
Weather showery in the north and east of Scotland, and foggy over England, the Netherlands, and north of France, but generally fine elsewhere. Rain falling later at all our western stations.

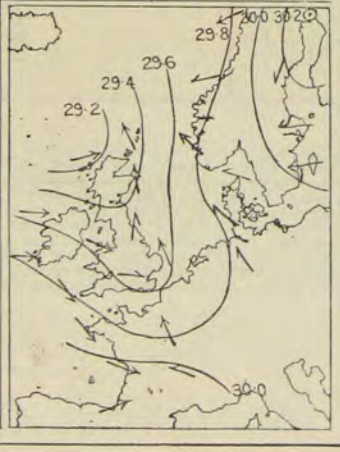
Temperature fallen a little in most places; readings ranging from 46° at Valencia to 29° in London. Slight frost at night over the eastern parts of England.

Wind strong from East in the south of Norway, and fresh from South-East at some of our western and northern stations, but moderate from South over the Channel. Fresh Southerly gales in Ireland and Scotland at night.

Sea rough at Sumburgh Head, Aberdeen, and Valencia, moderate to smooth elsewhere.

Barometer falling in most parts of our Islands, but rising at the Continental stations. Pressure still highest over the Gulf of Bothnia, but depression approaching our western coasts. Fall subsequently becoming general.





Friday, January 29.

Weather cloudy or overcast generally, with rain at most of our western and north-western stations. Rain, sleet, or hail falling later in all parts of the Kingdom, and lightning occurring in the south of Ireland at night.

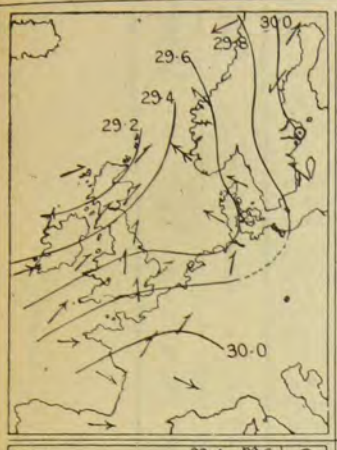
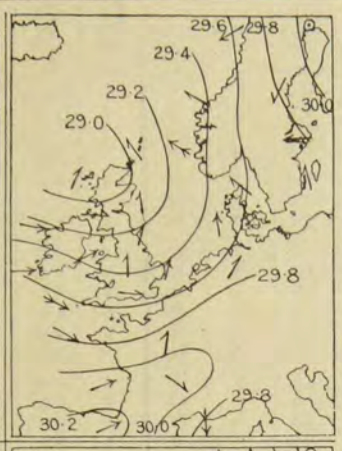
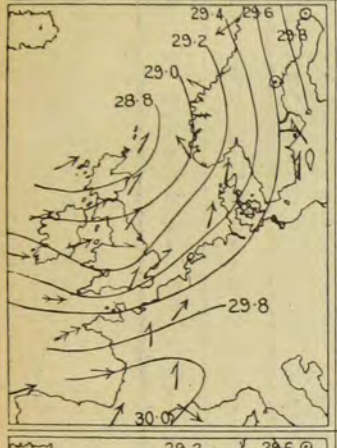
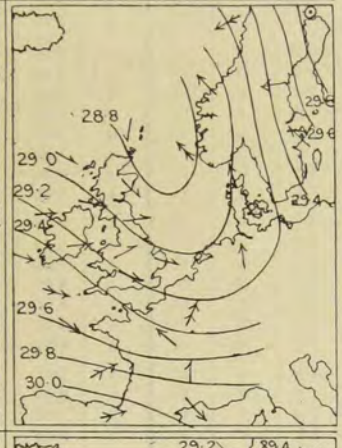
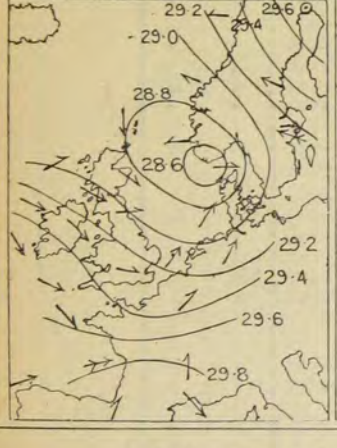
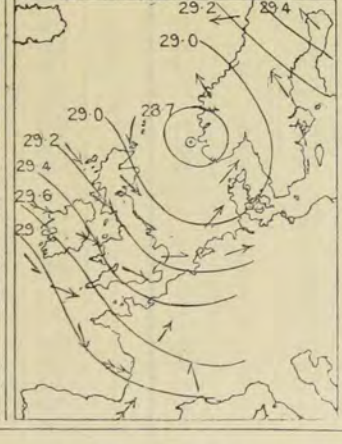
Temperature risen a little in most places; readings ranging from 47° at Scilly to 34° at York. Frost occurring at night at many stations.

Wind North-Westerly on our south-west coasts, but Southerly or South-Easterly elsewhere; strong in force generally, with a gale in the north and east of Scotland. Subsequently veering to West or North-West at all our western and southern stations.

Sea high off the north of Scotland, and rough on our south-west, west, and north coasts generally.

Barometer falling at all stations except Valencia. Large depression lying off the west of Scotland, with some "V-shaped" subsidiary disturbances over the St. George's and Bristol Channels. Depressions moving eastwards later, and barometer rising in west and south.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, January 30.** *Weather* unsettled generally, with rain in the south of France and hail or sleet showers at many of our western and northern stations. Cold showers falling later in most parts of the Kingdom. Bright aurora seen in the north of Scotland at night. *Temperature* risen at our southern and many of the Continental stations, but fallen elsewhere; readings ranging from 47° at Scilly to 33° at Stornowny, Spurn Head, and Yarmouth. *Wind* Easterly or South-Easterly in Scandinavia and Denmark, but chiefly South-Westerly elsewhere; light in force on our north and east coasts, but strong in the west and south. Subsequently increasing to fresh gale from South-West or West over the English Channel. *Sea* rough off our south-west coasts and rather rough at Sumburgh Head and Mullaghmore. *Barometer* falling at all but our southern and the French stations. Pressure high both in Sweden and the south of France, with a large depression off our extreme north-west coasts and some subsidiary disturbances over the North Sea. Depression subsequently moving slowly in an easterly direction.	
		**Sunday, January 31.** *Weather* fine at some of the Irish and Scotch stations, but cloudy or overcast elsewhere, with snow, hail, or cold rain in many places. Snow falling later in most parts of the Kingdom, with a thunderstorm at Yarmouth and lightning at Spurn Head, Mullaghmore, and in London. *Temperature* fallen a little in the north, but risen elsewhere; readings ranging from 51° at Scilly to 29° at Stornoway. *Wind* Southerly on the eastern shores of the North Sea, but South-Westerly or Westerly elsewhere; light or moderate in force in the north and east, but strong in the west and south, with a gale at Scilly, *Sea* high at Scilly and rough in the west and south generally. *Barometer* falling generally. Pressure still high in the south of France, and relatively high in Sweden, with a large depression off the north and north-west of Scotland. Depression moving eastwards later, and barometer rising in most parts of our Islands.	
		**Monday, February 1.** *Weather* fine in most parts of our Islands, but dull and unsettled at the continental stations. Showers of hail, sleet, or cold rain falling later in many places. *Temperature* fallen a little over the United Kingdom, but risen in Scandinavia and France; readings varying from 47° at Scilly to 25° at Wick. Slight frost occurring at night. *Wind* Westerly or North-Westerly over the United Kingdom, but South-Westerly in France, and South-Easterly or Easterly in Scandinavia, light or moderate on our north and north-east coasts, but strong elsewhere, with gales in the north-west of Ireland. *Sea* rough in the west and south generally. *Barometer* rising on our western and northern coasts, but falling elsewhere. Pressure still highest in south of France, with depression of previous day off the south of Norway. Rise becoming general later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ➢⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 17 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	43	29	39·6	32·1	36·0	− 3·2	0	42	7	0·81	−0·01	*	*
	Stornoway	44	24	39·9	32·0	36·1	− 2·9	0	41	5	1·08	−0·06	9	16
	Wick	42	22	38·9	32·3	35·7	− 2·9	0	44	6	0·63	+0·15	*	*
1. SCOTLAND, E.	Nairn	42	27	39·1	31·0	35·2	− 2·8	0	48	6	0·18	−0·24	*	*
	Aberdeen	42	28	39·0	33·3	36·3	− 1·1	0	40	5	0·73	+0·14	15	27
	Leith	42	28	39·1	31·9	35·6	− 2·6	0	45	5	0·47	+0·03	*	*
2. ENGLAND, N.E.	Alnwick Castle	40	30	37·1	31·3	34·3	− 3·7	0	54	4	0·67	+0·14	*	*
	Durham	41	28	37·2	30·3	33·9	− 4·3	0	57	5	0·59	+0·13	11	19
	Shields	42	30	38·6	32·4	35·6	− 3·0	0	45	4	0·30	−0·10	*	*
	Scarborough ℳ	40	30	37·9	31·8	35·0	− 3·2	0	49	5	0·63	+0·19	*	*
	York	41	32	39·0	32·7	36·0	− 2·3	0	42	5	0·79	+0·34	7	12
	Spurn Head	41	32	38·6	33·6	36·2	− 2·7	0	41	5	0·43	?	*	*
3. ENGLAND, E.	Hillington ℳ	42	27	40·7	31·2	36·1	− 1·6	0	41	4	0·19	−0·25	23	38
	Yarmouth	43	29	39·7	32·0	36·0	− 3·2	0	42	4	0·27	−0·22	*	*
	Geldeston	44	24	41·7	31·8	37·0	− 2·2	0	35	5	0·21	−0·17	23	38
	Cambridge	45	27	42·1	31·3	37·0	− 1·4	0	40	3	0·29	−0·08	19	31
	Rothamsted	42	27	38·2	31·0	34·7	− 3·5	0	51	4	0·67	+0·06	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	40	29	38·3	31·3	34·9	− 4·3	0	50	5	0·75	+0·33	13	22
	Loughborough	44	31	41·3	33·1	37·4	− 0·9	0	32	5	0·43	−0·06	*	*
	Leicester	42	31	40·5	32·9	36·9	− 1·0	0	36	5	0·41	−0·06	14	23
	Cheadle ℳ	39	30	37·4	31·1	34·4	− 3·2	0	53	7	1·19	+0·54	*	*
	Churchstoke ℳ	43	31	39·8	32·7	36·4	− 2·7	0	39	6	0·93	+0·25	16	27
	Hereford ℳ	47	32	42·1	32·9	37·7	− 1·6	0	33	7	1·28	+0·67	*	*
	Cirencester	44	29	41·0	31·4	36·4	− 2·5	0	29	6	1·15	+0·42	13	21
	Oxford	44	33	42·4	34·9	38·8	− 0·6	1	26	6	1·04	+0·53	16	26
5. ENGLAND, S.	London†	47	28	44·9	32·7	39·0	− 0·4	8	36	3	0·32	−0·17	11	18
	Strathfield Turgiss ℳ	47	31	43·7	32·3	38·2	− 1·0	5	37	6	0·54	−0·04	*	*
	Dungeness	46	34	44·7	36·6	40·8	+ 0·3	8	22	4	0·83	+0·27	*	*
	Hastings (St. Leonard's)	47	31	44·8	34·6	39·9	− 0·5	8	29	4	0·92	+0·32	22	35
	Southampton	48	32	45·9	35·8	41·1	+ 1·7	11	26	6	1·07	+0·29	12	19
	Hurst Castle	48	34	45·9	37·4	41·8	+ 0·6	11	20	6	0·76	+0·09	*	*
	Stowell ℳ	47	28	43·4	33·4	38·6	− 2·9	4	32	6	1·28	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	41	30	40·3	34·0	37·3	− 1·9	0	33	3	1·51	−0·48	*	*
	Glasgow	40	28	37·6	30·5	34·2	− 4·5	0	55	6	0·75	−0·25	4	7
	Ardrossan	41	30	39·6	33·3	36·6	− 2·8	0	38	7	0·61	−0·34	*	*
	Douglas (Isle of Man)	44	31	41·6	35·2	38·5	− 2·1	0	25	5	1·54	+0·48	11	19
7. ENGLAND, N.W.	Newton Reigny (Penrith)	38	29	36·6	31·2	34·0	− 3·5	0	56	7	1·48	+0·73	2	3
	Barrow-in-Furness	42	33	39·7	34·4	37·2	− 3·3	0	34	5	1·10	+0·28	*	*
	Stonyhurst	42	30	39·3	32·3	35·9	− 3·0	0	43	6	1·25	+0·30	4	7
	Blackpool ℳ	43	31	39·4	33·6	36·6	− 4·1	0	38	7	1·29	+0·64	6	10
	Manchester	41	32	39·3	33·8	36·7	− 2·5	0	37	7	1·25	+0·56	*	*
	Liverpool Obs' (Bidston)	45	33	40·1	34·0	37·2	− 3·2	0	34	7	0·87	+0·39	*	*
	Llandudno ℳ	46	31	41·4	34·1	37·9	− 4·0	0	29	4	0·41	−0 21	16	27
	Holyhead	45	28	41·9	30·6	36·5	− 6·2	0	39	5	0·35	−0·40	*	*
8. ENGLAND, S.W.	Llandovery	43	24	40·6	29·9	35·5	− 4·9	0	46	7	1·09	−0·12	*	*
	Pembroke	46	30	43·9	35·6	39·9	− 2·9	5	25	5	0·67	−0·18	23	38
	Arlington (N. Devon)	45	21	41·3	30·7	36·2	− 4·2	0	41	7	1·62	+0·57	*	*
	Cullompton ℳ	48	25	45·4	30·8	37·4	− 3·9	4	42	7	2·20	+1·39	13	21
	Falmouth	50	31	45·1	36·6	41·0	− 2·6	9	22	6	1·84	+1·08	23	37
	Plymouth	50	25	44·5	32·1	38·6	− 4·5	7	39	7	1·71	+0·81	13	21
	Prawle Point	48	31	45·6	35·4	40·7	− 2·0	10	27	6	1·25	?	*	*
9. IRELAND, N.	Malin Head	44	31	42·1	32·9	37·7	− 2·7	0	33	5	0·51	?	*	*
	Londonderry	44	30	41·0	31·7	36·5	− 4·3	0	39	6	1·74	+0·87	*	*
	Mullaghmore	45	30	41·4	33·4	37·6	− 4·4	0	31	6	1·13	+0·29	*	*
	Belmullet	45	33	42·3	34·3	38·5	− 0·9	1	29	6	1·52	?	*	*
	Markree Castle	44	29	39·8	31·2	35·7	− 5·7	0	44	6	1·17	+0·42	10	17
	Brookeborough	42	27	38·9	31·3	35·2	− 4·9	0	48	6	1·03	?	*	*
	Armagh	43	28	39·6	30·9	35·4	− 4·7	0	46	6	0·99	+0·33	9	15
	Donaghadee	44	30	40·3	33·6	37·1	− 3·6	0	34	7	1·20	+0·51	*	*
	Edgeworthstown	43	29	38·6	30·9	34·9	− 4·8	0	50	5	0·74	+0·05	*	*
10. IRELAND, S.	Dublin	44	29	41·3	33·1	37·4	− 3·7	0	32	5	0·22	−0·29	17	28
	Parsonstown	43	27	39·7	30·9	35·5	− 4·7	0	46	5	0·77	+0·08	10	17
	Kilkenny	45	25	40·5	30·7	35·8	− 4·2	0	43	5	0·97	+0·18	*	*
	Waterford	46	28	41·9	31·4	36·9	− 5·2	0	36	4	0·96	−0·14	*	*
	Roche's Point	47	30	44·6	36·0	40·5	− 2·9	7	24	5	0·93	−0·35	*	*
	Valencia	49	27	46·4	37·7	42·2	− 3·1	19	12	7	1·99	+0·57	16	26
	Killarney	46	24	43·1	33·9	38·7	− 4·9	3	31	7	1·93	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	35	47·7	40·7	44·3	− 1·9	22	4	6	1·03	+0·21	*	*
	Jersey (Noirmont)	49	34	45·9	38·9	42·1	− 0·1	18	11	7	0·99	+0·30	18	28

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 6.] *New Series.* WEEK ENDING MONDAY, 8TH FEBRUARY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 24.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	50	22	41·2	30·1	35·7	3 below.	0	44	5	− 31	283	+ 89
	1. SCOTLAND, EAST	55	18	41·4	27·0	34·2	4 below.	0	55	11	− 28	317	+ 75
	2. ENGLAND, N.E.	46	24	38·5	29·7	34·2	5 below.	0	55	12	− 25	307	+ 78
	3. ENGLAND, EAST	44	21	38·0	28·1	33·1	6 below.	0	62	12	− 32	329	+ 82
	4. MIDLAND COUNTIES	46	21	39·2	29·2	34·3	5 below.	0	54	18	− 36	306	+ 63
	5. ENGLAND, SOUTH	48	23	40·0	30·0	35·0	6 below.	0	49	38	− 22	251	+ 57
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	50	15	40·2	30·2	35·2	4 below.	0	48	23	− 29	254	+ 71
	7. ENGLAND, N.W.	45	15	38·9	30·5	34·8	6 below.	0	50	19	− 30	254	+ 63
	8. ENGLAND, S.W.	47	20	42·8	31·9	37·4	5 below.	2	36	40	− 59	217	+103
	9. IRELAND, NORTH	54	22	43·9	33·1	38·5	2 below.	5	32	29	− 45	208	+ 47
	10. IRELAND, SOUTH	56	22	46·1	35·1	40·7	2 below.	11	28	51	− 69	198	+ 88
	— CHANNEL ISLANDS	48	30	44·4	38·5	41·5	3 below.	7	14	87	− 33	76	+ 15

	DISTRICTS. (See p. 24.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	3	5 less.	37	+ 8	6·2	+ 1·2	16	27	43	0	14	0
	1. SCOTLAND, EAST	1	1	4 less.	26	+ 6	3·0	+ 0·1	29	48	85	+13	27	+ 4
	2. ENGLAND, N.E.	2	1	4 less.	26	+ 5	3·6	+ 0·8	18	28	58	+16	17	+ 5
	3. ENGLAND, EAST	3	2	3 less.	29	+ 7	3·2	− 0·6	24	37	100	+33	29	+10
	4. MIDLAND COUNTIES	2	2	4 less.	29	+ 8	4·2	+ 0·7	13	20	73	+17	21	+ 5
	5. ENGLAND, SOUTH	2	2	4 less.	28	+ 7	4·4	+ 0·6	16	25	81	+24	23	+ 7
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	6	4 less.	31	+ 5	6·5*	+ 0·4	12	19	55	+ 7	17	+ 3
	7. ENGLAND, N.W.	3	3	4 less.	30	+ 7	5·5	+ 1·0	17	27	57	+ 7	17	+ 2
	8. ENGLAND, S.W.	4	3	7 less.	33	+ 9	6·1	0·0	15	24	82	+13	23	+ 4
	9. IRELAND, NORTH	5	10	3 more.	32	+ 5	6·2	+ 1·7	10	15	45	−23	13	− 7
	10. IRELAND, SOUTH	5	11	1 more.	28	+ 2	5·1	− 0·7	11	17	66*	−13	19	− 4
	— CHANNEL ISLANDS	4	5	2 less.	37	+11	4·6	− 0·2	33	50	110	+14	30	+ 4

General Remarks.

Weather has been fairer than that reported for some time past, especially over the southern and eastern parts of the Kingdom. Some snow, sleet, or rain has again fallen in most places, but, excepting over Ireland, the amount has been small.

Temperature has been below the mean in all districts, the deficit ranging from 2° in Ireland to 5° or 6° over the whole of England. At all our more western and northern stations a considerable rise had taken place by the end of the period, while in the south and east of England the thermometer had fallen. The maxima, which were recorded on the 2nd over our south-eastern districts and on the 8th elsewhere, ranged from 44° in "England, E." to 55° in "Scotland, E." and 56° in "Ireland, S." The minima, which were registered on the 7th or 8th in the south-east of England and on various dates in the other parts of the country, ranged from 15° in "Scotland, W." and "England, N.W." and 18° in "Scotland, E." to 24° in "England, E." and 30° in the "Channel Islands". The minima recorded over Ireland and in some parts of Scotland during the night of the 7th-8th were as high as from 43° to 48°.

Rainfall has been a little more than the mean in Ireland, but less over England and Scotland.

Bright sunshine has been more prevalent than of late in most districts, the percentage of the possible amount of duration varying from 15 in "Ireland, N.", 17 in "Ireland, S.", and 19 in "Scotland, W." to 37 in "England, E.", 48 in "Scotland, E." and 50 in the "Channel Islands".

Depressions observed.—The distribution of pressure has been subject to considerable changes. At the opening of the period a depression lay over Norway, the barometer being highest over the Bay of Biscay, while on the following day an elongated shallow depression was passing in a south-easterly direction over England. On the 5th a depression skirted our extreme western and north-western coasts, while a well defined subsidiary disturbance moved southwards from the south of Ireland to the Bay of Biscay. Towards the end of the period a large area of high pressure had been formed over the south of Scandinavia, Denmark, Germany, the Netherlands, and the south-east of England. Westerly to North-Westerly winds were general until the 5th, when Southerly breezes set in on our extreme western coasts and variable or Northerly airs over the greater part of England.

* These values have been altered somewhat owing to the receipt of some further information.

NOTE.—Owing to a serious error in the minimum temperatures recently reported from Holyhead the accumulated values for "England, N.W." have been altered somewhat. A list of corrections for the five previous weeks is given on the accompanying slip.

E 20755. 350.—2/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

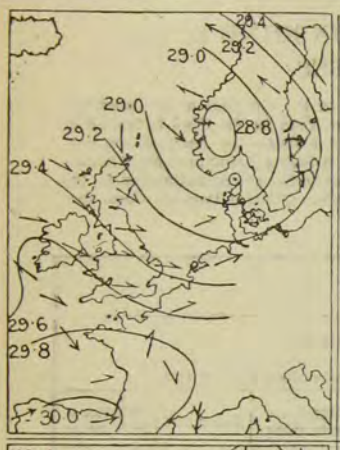
Weather

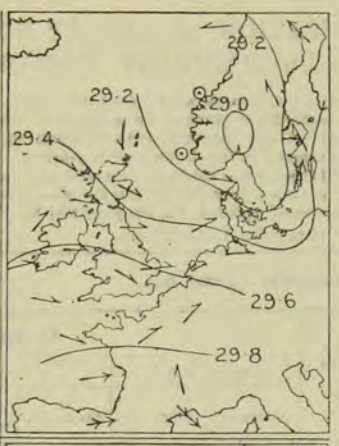
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, February 2.

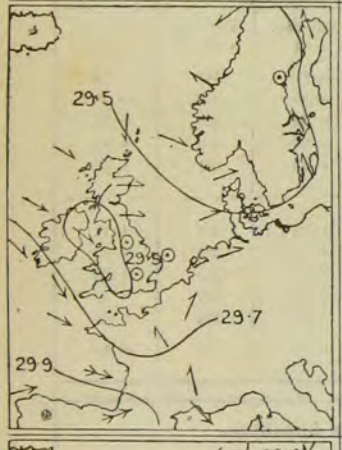
Weather dull on our extreme south-west coasts and also at some of the Scandinavian stations, but generally fine elsewhere. Rain falling in west later.

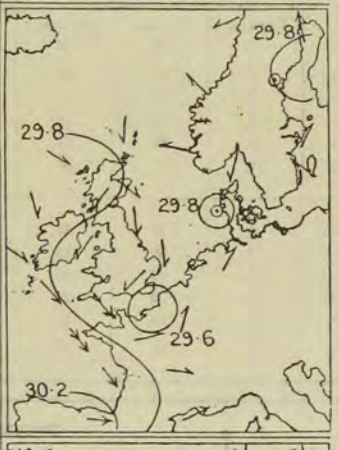
Temperature fallen a little at our southern and the French stations, but risen elsewhere; readings ranging from 44° at Scilly to 33° at Parsonstown. Sharp frost occurring in Scotland at night, lowest minimum being 22° at Stornoway.

Wind South-Easterly in Sweden and the north of Norway as well as at Valencia, but Westerly or North-Westerly elsewhere; light or moderate in force generally. Subsequently backing to South-West in many parts of our Islands.

Sea rather rough on the Welsh and Cornish coasts.

Barometer falling somewhat briskly in the south of Ireland, but rising in most other parts of Western Europe. Pressure highest over Spain, with a large depression over Norway. Depression filling up gradually later, but barometer falling a little at many of our western stations.





Wednesday, February 3.

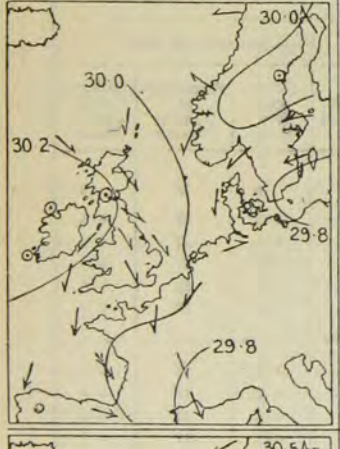
Weather fair in Scotland and also on our south-west coasts, but cloudy elsewhere, with rain or sleet over England as well as in the northern parts of Ireland and France. Improvement taking place over England later.

Temperature risen at our south-western and the French stations, but fallen elsewhere; readings ranging from 47° at Scilly to 24° at Wick. Sharp frost at night over Scotland and central Ireland.

Wind light and variable over eastern and central England, but chiefly North-Westerly elsewhere; strong to a gale over the Bay of Biscay.

Sea high off the south-west of France, and rough at the mouth of the Channel.

Barometer rising at all but the English and French stations. Pressure still highest in Spain, with large but shallow depressions over Norway and the greater part of England. Former disturbance subsequently filling up and latter moving south-eastwards to the north-east of France.



Thursday, February 4.

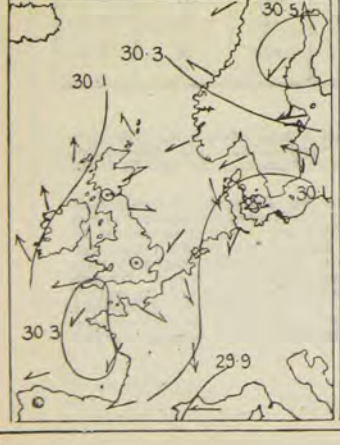
Weather fine over the greater part of our Islands, but dull at the French stations, and unsettled (with snow) in the north of Scandinavia. No important change later.

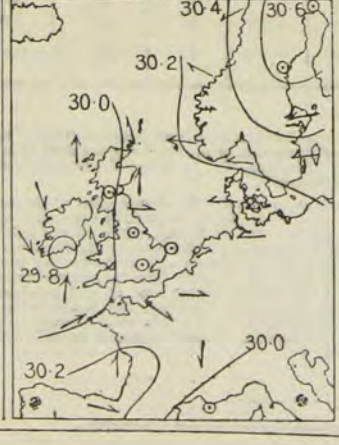
Temperature fallen several degrees in the west and south, but risen slightly in the north; readings ranging from 44° at Scilly to 26° at Ardrossan and Parsonstown. Frost occurring at night in many parts of the Kingdom, the lowest readings being 18° at Nairn and 19° at Leith.

Wind North-Westerly or Northerly, light or moderate in force in most localities, but strong to a gale in the west of France. Subsequently falling light and variable on our western coasts.

Sea moderate to smooth.

Barometer rising generally. Pressure now highest in Ireland, but relatively high in Scandinavia, with areas of low pressure over the Baltic and south-east of France. Western high pressure area subsequently extending eastwards, and Scandinavian anticyclone becoming more pronounced.





Friday, February 5.

Weather dull on our extreme west and north-west coasts, and also in Sweden and Denmark, but generally fine elsewhere, with, however, fog or mist in many parts of Great Britain. Rain falling in the west and north later.

Temperature risen in Ireland and the west of Scotland, but fallen elsewhere; readings ranging from 46° at Valencia to 20° at Nairn and Leith. Sharp frost occurring at night in many parts of the Kingdom.

Wind strong South-Easterly on our extreme western coasts, but light and variable over England and the east of Scotland, and fresh Northerly on the eastern shores of the North Sea. Subsequently backing to the South-Eastward in the west of England, but shifting to North-West in the west of Ireland.

Sea rather rough at Stornoway and Valencia, moderate to smooth at all other stations.

Barometer falling in most parts of our Islands, but rising elsewhere. Pressure now highest over the Gulf of Bothnia, but relatively high over the west of France, Depression subsequently moving northwards falong our extreme western coasts, and well defined subsidiary disturbance appearing off the south of Ireland.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

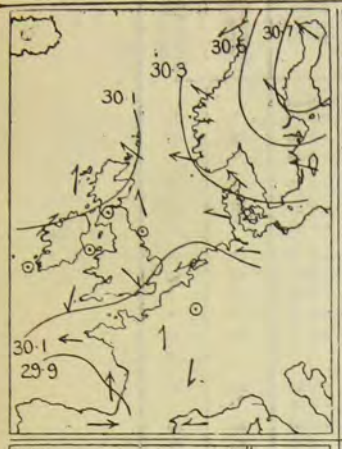
Weather

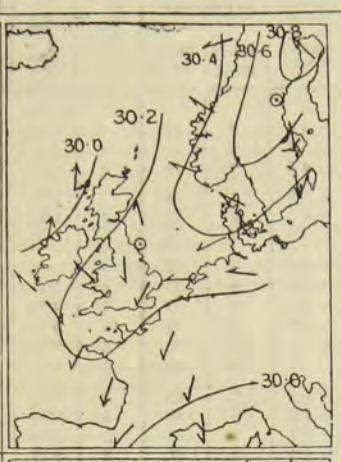
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, February 6.

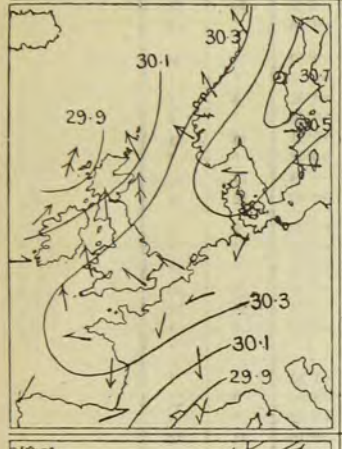
Weather rainy in the west of France, but generally fine elsewhere, with, however, snow at some of our eastern stations. Rain falling in extreme west and north-west later.

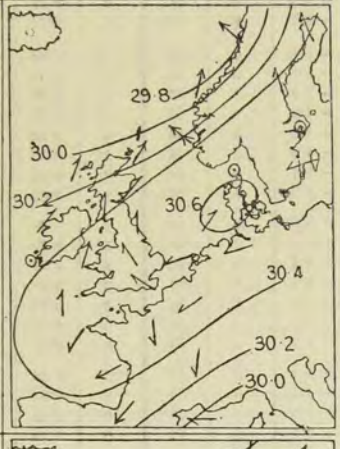
Temperature risen several degrees in the east of Scotland, but fallen elsewhere; readings ranging from 44° at Scilly to 23° at Cambridge. Sharp frost occurring over England at night.

Wind moderate from East or South-East in Scandinavia and Denmark and Southerly on our northern coasts, but northerly in the east and south of England. Fresh to strong Southerly gales in Scotland at night.

Sea rough at Scilly, moderate to smooth elsewhere.

Barometer rising at all but the French stations. Pressure now very high (30·8 ins.) over the Gulf of Bothnia and relatively high in the south of Ireland, with subsidiary disturbance of previous day over the Bay of Biscay. Depression subsequently appearing on our extreme north-west coasts.





Sunday, February 7.

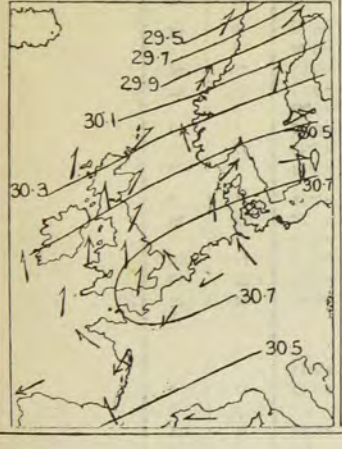
Weather rainy at several of our western stations, but fine elsewhere.

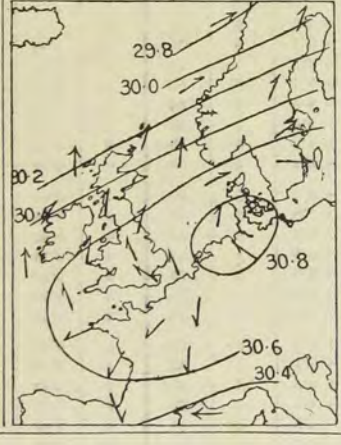
Temperature risen a little on our western and northern coasts, but fallen at our central and most of the Scandinavian stations; readings ranging from 50° at Valencia to 24° at Cambridge. Sharp frost occurring over England at night.

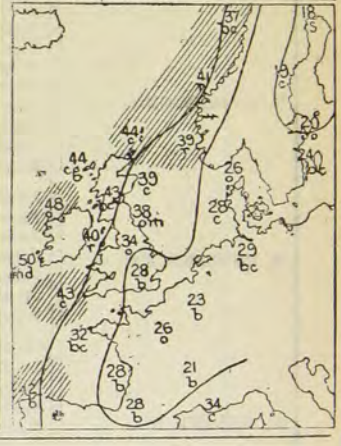
Wind North-Easterly over Denmark, the Netherlands and France, and Easterly or South-Easterly in the south of England, but chiefly Southerly elsewhere; light to fresh in force in most places, but strong to a gale in Scotland. Gale subsiding later.

Sea high off the north of Scotland and rough at one or two of our western stations.

Barometer falling in Norway and Scotland, but rising elsewhere. Pressure still highest over the Gulf of Bothnia, but band of relatively high pressure extending south-westwards to England, with depression off the north-west of Scotland. Large depression subsequently appearing off west of Norway.







Monday, February 8.

Weather fair in most parts of Western Europe, but foggy at some of the English stations, and rainy in the west of Norway. Rain falling later at several of our western stations.

Temperature risen several degrees in Scandinavia, and less decidedly in the west and north of our Islands, but fallen elsewhere, readings ranging from 50° at Valencia to 28° in London and at Cambridge. Sharp frost over England at night, lowest readings being 20° at Cambridge and 22° in London.

Wind moderate North-Easterly in France, and Easterly at the Channel station, but Southerly or South-Westerly elsewhere; strong to a gale in the west of Norway.

Sea rough at Sumburgh Head and Scilly, and rather rough at Mullaghmore, but moderate to smooth elsewhere.

Barometer rising at all but the Scandinavian stations, where brisk fall reported. Band of high pressure (with readings above 30·7 ins.) extending from Central Europe to the south-east of England, and large depression passing over the north of Scandinavia.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 21 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	45	30	40·7	32·6	36·7	− 2·3	0	37	4	0·16	−0·66	*	*
	Stornoway	50	22	43·1	29·0	36·1	− 2·9	3	47	5	0·46	−0·63	16	27
	Wick	48	22	39·7	28·7	34·2	− 4·5	0	55	2	0·17	−0·32	*	*
1. SCOTLAND, E.	Nairn	55	18	42·6	26·4	34·5	− 3·8	2	55	1	0·03	−0·37	*	*
	Aberdeen	50	24	40·9	28·1	34·5	− 3·4	0	53	2	0·36	−0·24	29	48
	Leith	50	19	40·7	26·6	33·7	− 4·4	0	58	0	—	−0·43	*	*
2. ENGLAND, N.E.	Alnwick Castle	43	25	38·3	28·6	33·5	− 4·8	0	60	0	—	−0·57	*	*
	Durham	44	24	38·5	27·7	33·1	− 5·5	0	62	1	0·01	−0·44	24	39
	Shields	46	26	40·3	28·7	34·5	− 4·1	0	53	2	0·24	−0·16	*	*
	Scarborough ℳ	41	29	38·6	32·1	35·4	− 2·9	0	46	3	0·18	−0·26	*	*
	York	40	28	37·6	29·4	33·5	− 5·3	0	60	2	0·02	−0·44	11	17
	Spurn Head	40	30	37·9	31·9	34·9	− 5·1	0	50	2	0·10	?	*	*
3. ENGLAND, E.	Hillington ℳ	41	22	39·0	27·2	33·1	− 5·4	0	62	3	0·12	−0·34	26	41
	Yarmouth	40	27	36·6	29·9	33·3	− 6·5	0	61	4	0·19	−0·31	*	*
	Geldeston	44	23	38·7	28·6	33·7	− 6·3	0	58	3	0·09	−0·30	25	39
	Cambridge	43	21	39·6	26·9	33·3	− 5·9	0	61	2	0·17	−0·21	20	31
	Rothamsted	44	22	36·3	27·8	32·1	− 6·7	0	69	4	0·25	−0·35	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	42	24	39·7	28·7	34·2	− 5·6	0	55	1	0·02	−0·40	15	24
	Loughborough	44	24	39·3	29·6	34·5	− 4·5	0	53	2	0·04	−0·45	*	*
	Leicester	44	25	38·9	30·2	34·6	− 3·9	0	52	2	0·08	−0·41	5	8
	Cheadle ℳ	41	24	37·5	28·2	32·9	− 5·6	0	64	3	0·29	−0·40	*	*
	Churchstoke ℳ	44	21	39·7	29·2	34·5	− 5·5	0	53	3	0·29	−0·41	15	24
	Hereford ℳ	46	23	41·9	28·2	35·1	− 4·9	0	48	3	0·33	−0·27	*	*
	Cirencester	43	24	38·0	29·0	33·5	− 5·7	0	60	2	0·28	−0·44	17	27
	Oxford	45	26	38·6	30·7	34·7	− 5·3	0	51	2	0·32	−0·29	12	19
5. ENGLAND, S.	London†	44	24	38·7	30·1	34·4	− 5·8	0	53	2	0·38	−0·10	7	11
	Strathfield Turgiss ℳ	44	23	39·3	28·8	34·1	− 5·9	0	55	1	0·27	−0·30	*	*
	Dungeness	45	26	39·1	30·7	34·9	− 6·1	0	50	2	0·27	−0·28	*	*
	Hastings (St. Leonard's)	46	27	37·5	29·4	33·5	− 7·4	0	60	3	0·29	−0·29	18	28
	Southampton	48	27	42·4	30·5	36·5	− 4·9	1	41	2	0·21	−0·54	24	37
	Hurst Castle	46	25	43·4	30·9	37·2	− 4·2	4	40	2	0·11	−0·66	*	*
	Stowell ℳ	44	26	39·4	29·7	34·7	− 5·7	0	51	3	0·15	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	50	20	40·0	28·6	34·3	− 5·2	0	54	3	0·86	+1·22	*	*
	Glasgow	50	15	38·3	27·0	32·7	− 6·1	0	65	3	0·07	−0·90	9	15
	Ardrossan	44	25	40·9	31·6	36·3	− 2·9	0	40	4	0·43	−0·47	*	*
	Douglas (Isle of Man)	44	25	41·4	33·4	37·4	− 3·5	0	32	6	1·18	+0·18	14	22
7. ENGLAND, N.W.	Newton Reigny (Penrith)	44	15	37·6	23·7	30·7	− 7·2	0	79	0	—	−0·84	19	31
	Barrow-in-Furness	43	27	38·4	31·0	34·7	− 6·0	0	51	3	0·48	−0·27	*	*
	Stonyhurst	40	24	37·9	29·5	33·7	− 5·3	0	58	3	0·17	−0·78	17	27
	Blackpool ℳ	41	23	37·9	29·8	33·9	− 7·1	0	57	3	0·28	−0·37	14	22
	Manchester	42	27	38·3	30·8	34·6	− 5·1	0	52	3	0·20	−0·45	*	*
	Liverpool Obsy (Bidston)	42	31	38·4	32·3	35·4	− 5·4	0	46	5	0·31	−0·17	*	*
	Llandudno ℳ	45	27	41·6	32·9	37·3	− 4·8	0	33	2	0·19	−0·43	17	27
	Holyhead	44	29	41·3	34·0	37·7	− 5·2	0	30	6	0·70	−0·04	*	*
8. ENGLAND, S.W.	Llandovery	45	20	41·9	27·7	34·8	− 6·2	0	50	4	0·41	−0·78	*	*
	Pembroke	46	32	43·7	35·7	39·7	− 3·3	5	23	6	0·35	−0·48	12	19
	Arlington (N. Devon)	46	24	41·0	29·7	35·4	− 5·5	0	46	4	0·32	−0·85	*	*
	Cullompton ℳ	47	24	42·3	29·2	35·8	− 6·0	1	45	4	0·14	−0·68	17	26
	Falmouth	47	32	43·9	36·8	40·4	− 3·3	5	20	4	0·59	−0·63	18	28
	Plymouth	47	25	43·6	31·3	37·5	− 5·6	4	39	3	0·19	−0·68	14	22
	Prawle Point	47	29	43·1	33·1	38·1	− 4·8	3	32	3	0·16	?	*	*
9. IRELAND, N.	Malin Head	51	32	44·4	36·3	40·4	+ 0·2	7	22	5	0·84	?	*	*
	Londonderry	54	26	43·0	32·2	37·6	− 3·1	3	35	4	0·95	+0·13	*	*
	Mullaghmore	54	28	46·7	37·0	41·9	+ 0·5	13	21	4	1·04	+0·19	*	*
	Belmullet	50	32	47·0	36·0	41·5	− 2·5	14	25	7	1·07	?	*	*
	Markree Castle	51	22	43·5	30·2	36·9	− 4·0	4	43	6	1·27	+0·55	9	14
	Brookeborough	50	23	42·6	31·5	37·1	− 2·7	2	38	4	1·38	?	*	*
	Armagh	51	26	42·3	32·5	37·4	− 2·8	1	33	5	0·78	+0·13	10	16
	Donaghadee	48	27	42·4	32·1	37·3	− 3·5	1	35	6	0·60	−0·08	*	*
	Edgeworthstown	51	24	43·0	29·9	36·5	− 3·2	3	43	5	1·39	+0·63	*	*
10. IRELAND, S.	Dublin	53	27	43·6	34·5	39·1	− 2·4	4	28	4	0·49	−0·06	13	21
	Parsonstown	54	24	44·0	30·1	37·1	− 3·3	6	43	4	0·97	+0·32	6	10
	Kilkenny	52	24	43·4	32·0	37·7	− 2·8	4	36	5	1·20	+0·44	*	*
	Waterford	47	22	44·4	33·9	39·2	− 3·6	7	30	6	1·30	+0·24	*	*
	Roche's Point	49	31	48·0	37·0	42·5	− 1·2	25	14	6	1·00	−0·27	*	*
	Valencia	53	36	50·9	40·6	45·8	+ 0·6	32	4	7	1·57	+0·22	13	20
	Killarney	53	29	48·7	37·8	43·3	− 0·1	27	12	5	0·97	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	48	38	46·3	40·0	43·2	− 2·8	17	6	5	0·74	−0·05	*	*
	Jersey (Noirmont)	47	30	42·4	36·9	39·7	− 2·4	1	18	3	0·33	−0·36	33	50

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 7.] *New Series.* WEEK ENDING MONDAY, 15TH FEBRUARY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1865-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 28.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	49	29	43·5	35·7	39·6	1 above.	4	23	9	− 33	306	+ 81
	1. SCOTLAND, EAST	51	28	45·6	35·6	40·6	2 above.	10	25	21	− 26	342	+ 67
	2. ENGLAND, N.E.	48	26	43·1	33·4	38·3	1 below.	3	31	15	− 34	338	+ 86
	3. ENGLAND, EAST	46	14	38·2	29·2	33·7	6 below.	0	58	12	− 49	387	+119
	4. MIDLAND COUNTIES	52	21	42·5	30·9	36·7	3 below.	1	39	19	− 53	345	+ 83
	5. ENGLAND, SOUTH	50	18	42·1	31·2	36·7	5 below.	0	38	38	− 43	289	+ 83
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	50	28	44·5	37·1	40·8	1 above.	7	19	30	− 36	275*	+ 71
	7. ENGLAND, N.W.	50	27	43·9	35·1	39·5	1 below.	5	25	24	− 39	279	+ 72
	8. ENGLAND, S.W.	51	23	44·6	33·5	39·1	4 below.	7	32	47	− 78	249	+130
	9. IRELAND, NORTH	55	26	46·6	36·5	41·6	1 above.	13	23	42	− 47	231	+ 50
	10. IRELAND, SOUTH	54	25	47·9	37·8	42·9	0 (average).	24	12	75	− 68	210	+ 90
	— CHANNEL ISLANDS	52	28	45·4	38·4	41·9	2 below.	10	15	97	− 54	91	+ 30

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 28.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	12	4 more.	42	+ 8	7·4	+ 1·6	15	24	58	0	16	0
	1. SCOTLAND, EAST	4	5	0 (average).	30	+ 6	3·5	+ 0·1	17	27	102	+14	27	+ 4
	2. ENGLAND, N.E.	3	1	4 less.	29	+ 4	3·7	+ 0·4	14	21	72	+18	18	+ 5
	3. ENGLAND, EAST	4	2	2 less.	38	+ 7	3·4	− 0·8	9	14	109	+27	26	+ 6
	4. MIDLAND COUNTIES	4	2	3 less.	33	+ 7	4·4	+ 0·4	12	18	85	+16	21	+ 5
	5. ENGLAND, SOUTH	5	3	3 less.	33	+ 7	4·7	+ 0·3	11	16	92	+21	22	+ 6
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	10	4 less.	36	+ 5	7·5	+ 0·5	6	10	61	0	15	0
	7. ENGLAND, N.W.	4	6	1 less.	34	+ 7	6·1	+ 0·9	13	20	70	+ 9	17	+ 2
	8. ENGLAND, S.W.	5	6	4 less.	38	+ 9	6·7	− 0·4	12	17	94	+11	22	+ 2
	9. IRELAND, NORTH	4	7	0 (average).	36	+ 4	6·9	+ 1·6	19	29	64	−17	16	− 4
	10. IRELAND, SOUTH	5	7	3 less.	33	+ 1	5·8	− 0·9	22	32	88	− 4	21	− 1
	— CHANNEL ISLANDS	6	4	3 less.	43	+11	5·0	− 0·5	14	20	124	+ 6	28	+ 1

General Remarks.

Weather has been mild and at times fair over Ireland and Scotland, but cold and dull over England, with much mist and fog during the earlier part of the period.

Temperature has been about equal to the mean in "Ireland, S." and 1° or 2° above it in "Ireland, N." and over Scotland, but below it elsewhere, the deficit in the south and east of England being 5° or 6°. The maxima, which were registered on different days in the various districts, varied between 46° in "England, E." and 54° or 55° in Ireland. The minima which were recorded on the 9th or 10th in the south-eastern parts of the Kingdom, and on the 15th elsewhere, ranged from 14° in "England, E." and 18° in "England, S." to 28° or 29° over Scotland and in the "Channel Islands".

Rainfall has been rather more than the mean in "Scotland, N." but less in nearly all other districts.

Bright sunshine has been less prevalent than it was last week, excepting at the Irish stations; the percentages of the possible amount of duration ranged from 10 in "Scotland, W." to between 14 and 21 over England, and to 32 in "Ireland, S."

Depressions observed.—During nearly the whole of this period a series of disturbances travelled in a north-easterly direction some distance to the northward of our Islands, but the only depressions which appeared in our immediate neighbourhood were some "V-shaped" subsidiaries which were observed over different parts of the Kingdom on the 13th and 14th. Southerly to South-Westerly winds, moderate to fresh in force, were experienced in the west and north during the early part of the week, and subsequently spread to our southern and eastern coasts also.

* This value has been altered slightly owing to the receipt of further information.

E 20874. 350.—2/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

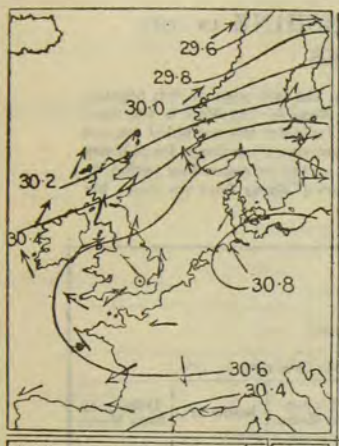
Weather

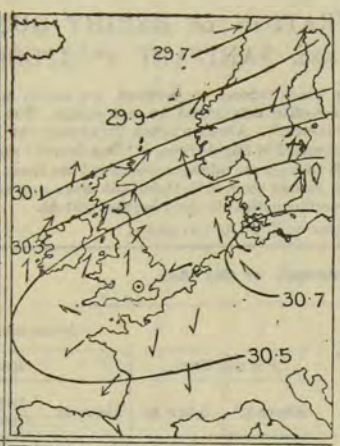
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, February 9.

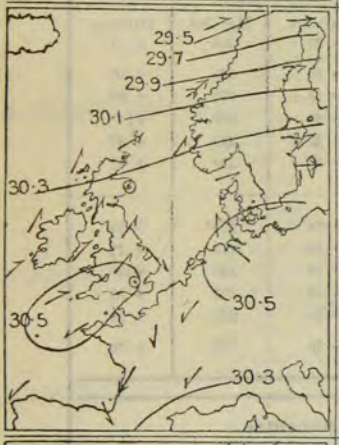
Weather dull and unsettled in the west and extreme north, but fine elsewhere, with, however, a good deal of fog or mist over England.

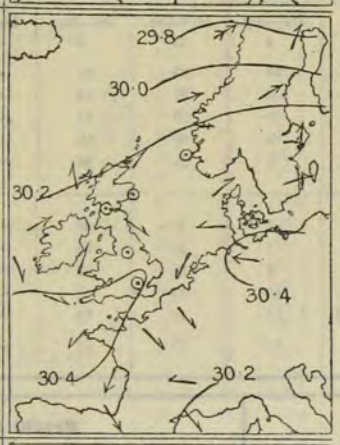
Temperature risen a little in the north, but fallen in most other districts; readings ranging from 48° at Valencia and 47° at Nairn and Mullaghmore to 23° at Cambridge. Sharp frost occurring over the south-east of England at night, the lowest readings being 19° at Cambridge, 22° in London, and 23° at Hurst Castle and Oxford.

Wind Easterly in France and South-Easterly in England, but South-Westerly elsewhere; light or moderate in force on all but our extreme north-west coasts.

Sea rough at some of our extreme western and northern stations, but moderate to smooth elsewhere.

Barometer falling generally. Anticyclone, with readings above 30·8 ins., lying over Germany, and band of relatively high pressure extending over England, with large depression near Bodö. Depression moving away later, and barometer rising in the north of Scandinavia.





Wednesday, February 10.

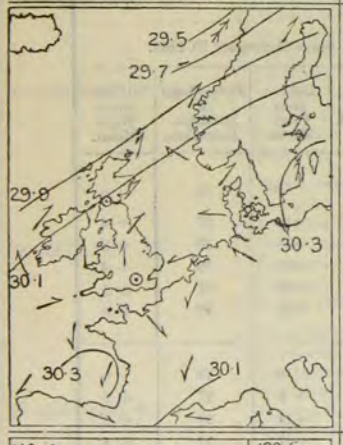
Weather fine in France, but foggy or misty over the greater part of England and rainy at several of the Irish and Scotch stations. Some improvement taking place in west and north later.

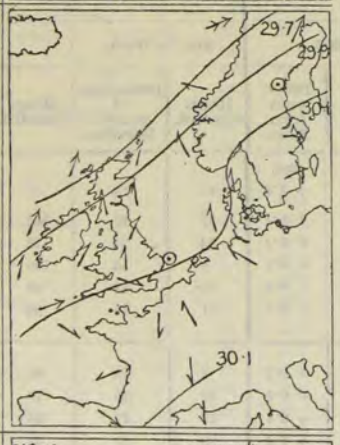
Temperature fallen a little in our Islands, but risen at many of the Continental stations; readings ranging from 49° at Valencia to 24° at Cambridge. Slight frost occurring over England during the earlier part of the night.

Wind North-Easterly at our southern and the French stations, but South-Westerly elsewhere; light or moderate in force generally.

Sea rather rough at Sumburgh Head and Scilly; moderate to smooth elsewhere.

Barometer falling at all but our extreme northern stations. Anticyclone still lying over Germany, with separate high pressure system over the south of England and depression over the north of Scandinavia. Fall continuing over our Islands and France all day.





Thursday, February 11.

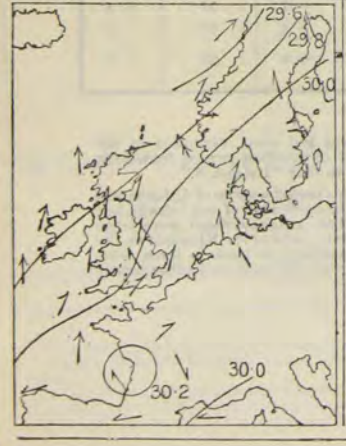
Weather fine at most of the Irish and Scotch stations, but foggy over England, Denmark, the Netherlands, and north of France. Slight rain falling later in many parts of the Kingdom.

Temperature fallen slightly in the west and north, but risen several degrees over the eastern, central, and southern parts of England; readings ranging from 47° at Scilly to 32° at Aberdeen and Leith, and 31° at Dungeness.

Wind North-Easterly at some of the Channel stations as well as in the west of France, but variable over central England, and moderate Southerly or South-Westerly in Scotland and the north of Ireland. South-Westerly breezes subsequently extending to the south-east of England.

Sea moderate to smooth, except at Stornoway.

Barometer falling generally. Pressure uniformly high over Denmark, the Netherlands, France, and the south of England, and depressions skirting our north-west coasts in a north-easterly direction. Fall continuing all day.



Friday, February 12.

Weather fine at several of the Irish and Scotch stations, but cloudy or overcast elsewhere, with fog or mist in many parts of England. Rain falling later in Ireland and the south-east of England.

Temperature fallen a little in the north or Scotland and north-west of England, but risen elsewhere; readings ranging from 49° at Valencia to 34° at Shields and Liverpool.

Wind Southerly or South-Westerly, light or moderate in force in most places, but strong in the west of Ireland. Subsequently shifting to West or North-West on our extreme north-west coasts.

Sea rather rough on the west coasts of Ireland and Norway, but moderate to smooth elsewhere.

Barometer falling generally. Pressure highest over France and lowest to the westward and northward of our Islands. Large depression with "V-shaped" subsidiaries subsequently appearing over our west and north-west coasts.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

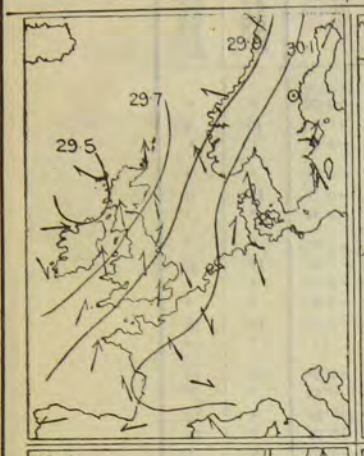
Weather

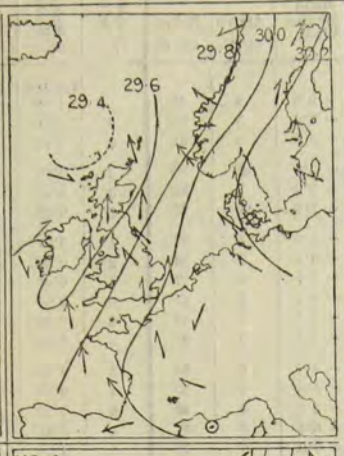
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, February 13.

Weather fair in the north-west of England and south of France, but cloudy elsewhere with rain in many parts of our Islands. Snow in north of Scotland at night.

Temperature fallen in the west of Ireland, but risen in most other localities; readings ranging from 48° at Parsonstown and Roche's Point to 36° at Spurn Head.

Wind Westerly and North-Westerly in the extreme west, but Southerly or South-Easterly elsewhere; strong in force at some of our western and northern stations.

Sea rather rough on several of the more exposed parts of our south-west, west, and north coasts, but moderate to smooth elsewhere.

Barometer falling at all but the Swedish stations. Pressure highest in Sweden and relatively high in France, with a depression off the west of Scotland and a "V-shaped" subsidiary disturbance over the south of Ireland. Depression subsequently moving eastwards and barometer rising in Ireland.

Sunday, February 14.

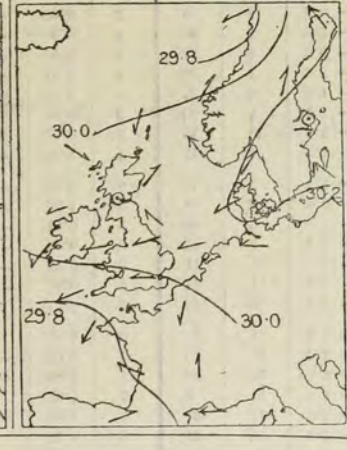
Weather fine at our western stations and also in some parts of France, but cloudy elsewhere with snow or sleet in Scotland and rain at several of the English stations. Fine weather extending later to all but our south-east coasts.

Temperature risen a little in Sweden, Denmark, and the East of England, but fallen elsewhere; readings ranging from 43° at Scilly to 33° at Wick and Nairn, and 31° at Parsonstown. Sharp frost over central England at night.

Wind South-Westerly in Scotland and the north of Ireland, but Southerly or South-Easterly elsewhere; fresh in force on our east and south-east coasts. Subsequently shifting to North over English Channel.

Sea rough at Sumburgh Head; moderate to smooth elsewhere.

Barometer falling on all but our western coasts. Pressure still highest in Sweden, with depression of the previous day over Scotland and subsidiary disturbance over the Channel. Rise extending to all parts of our Islands later.



Monday, February 15.

Weather rainy at some of our southern stations, and dull in Scandinavia and Denmark, but fine elsewhere, with, however, fog in the north of England.

Temperature risen in France, but fallen in our Islands, quickly at our central and north-eastern stations; readings ranging from 41° at Scilly, Dungeness, and Jersey to 23° at Loughborough.

Wind light South-Westerly on our northern coasts and variable at the more central stations, but fresh from East over the Channel and north of France.

Sea rather rough at Scilly; moderate to smooth elsewhere.

Barometer rising at all but the French stations. Pressure still highest in Sweden, but relatively high over our Islands, with a depression off the west of Norway, and a new disturbance over the Bay of Biscay. Fall extending to our southern coasts later.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 25 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	46	32	43·3	36·3	39·8	+ 0·8	4	21	5	1·35	+0·52	*	*
	Stornoway	49	29	43·9	34·4	39·2	− 0·2	5	28	7	1·70	+0·69	15	24
	Wick	47	30	43·3	36·4	39·9	+ 0·9	4	21	2	0·47	−0·03	*	*
1. SCOTLAND, E.	Nairn	51	30	46·3	36·4	41·4	+ 2·6	12	23	4	0·70	+0·31	*	*
	Aberdeen	49	28	44·4	34·7	39·6	+ 1·2	7	28	5	0·45	−0·17	17	27
	Leith	50	28	46·0	35·6	40·8	+ 1·5	11	25	2	0·39	−0·01	*	*
2. ENGLAND, N.E.	Alnwick Castle	44	28	42·7	34·4	38·6	− 0·4	2	27	1	0·07	−0·51	*	*
	Durham	47	28	44·5	31·8	38·2	− 0·8	7	38	2	0·06	−0·39	17	26
	Shields	46	31	44·9	35·0	40·0	+ 0·6	8	27	1	0·03	−0·37	*	*
	Scarborough ℜ	46	31	42·7	34·9	38·8	− 0·2	2	25	3	0·08	−0·36	*	*
	York	48	26	44·7	33·0	38·9	− 0·6	8	34	4	0·13	−0·34	10	15
	Spurn Head	42	27	39·0	31·3	35·2	− 4·2	0	48	4	0·08	?	*	*
3. ENGLAND, E.	Hillington ℜ	45	23	39·1	29·8	34·5	− 4·8	0	53	4	0·23	−0·25	13	19
	Yarmouth	41	24	36·9	30·3	33·6	− 6·8	0	59	4	0·17	−0·33	*	*
	Geldeston	46	20	39·6	30·4	35·0	− 5·8	0	49	3	0·19	−0·23	8	12
	Cambridge	46	19	40·1	27·7	33·9	− 6·4	0	57	4	0·21	−0·19	7	10
	Rothamsted	40	14	35·4	28·0	31·7	− 8·0	0	72	5	0·28	−0·20	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	48	23	43·7	32·3	38·0	− 2·0	5	35	2	0·06	−0·36	7	19
	Loughborough	50	22	43·4	31·1	37·3	− 2·5	4	39	3	0·19	−0·30	*	*
	Leicester	49	26	42·4	31·2	36·8	− 2·7	1	38	3	0·20	−0·31	11	16
	Cheadle ℜ	46	28	40·7	32·6	36·7	− 2·5	0	37	5	0·28	−0·34	*	*
	Churchstoke ℜ	48	21	43·4	29·0	36·2	− 4·3	4	46	4	0·40	−0·22	17	25
	Hereford ℜ	52	22	43·9	29·9	36·9	− 3·9	5	44	3	0·32	−0·28	*	*
	Cirencester	46	21	40·6	30·3	35·5	− 4·3	0	46	4	0·31	−0·40	14	21
	Oxford	49	23	41·9	31·0	36·5	− 4·1	0	39	5	0·17	−0·35	12	18
5. ENGLAND, S.	London†	49	22	41·3	30·6	36·0	− 5·2	0	42	5	0·13	−0·35	2	3
	Strathfield Turgiss ℜ	50	18	40·8	28·2	34·5	− 6·4	0	53	5	0·11	−0·44	*	*
	Dungeness	50	24	42·6	31·9	37·3	− 4·4	2	36	4	0·35	−0·18	*	*
	Hastings (St. Leonard's)	44	25	40·8	32·9	36·9	− 4·6	0	36	5	0·21	−0·34	20	29
	Southampton	50	23	44·1	32·6	38·4	− 2·9	6	35	4	0·24	−0·48	10	15
	Hurst Castle	49	23	43·6	31·9	37·8	− 4·5	4	37	6	0·38	−0·27	*	*
	Stowell ℜ	47	22	41·3	30·2	35·8	− 5·2	0	43	6	0·36	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	50	33	45·0	36·6	40·8	+ 1·0	8	21	6	2·45	+0·30	*	*
	Glasgow	46	32	43·7	37·2	40·5	+ 1·3	5	18	6	0·70	−0·25	5	8
	Ardrossan	46	35	44·6	38·1	41·4	+ 1·9	7	16	4	0·47	−0·41	*	*
	Douglas (Isle of Man)	47	28	44·7	36·4	40·6	− 0·4	8	22	5	0·47	−0·49	7	11
7. ENGLAND, N.W.	Newton Reigny (Penrith)	46	27	42·8	33·4	38·1	− 0·2	2	31	2	0·36	−0·44	11	17
	Barrow-in-Furness	46	33	42·4	34·7	38·6	− 2·5	1	26	4	0·40	−0·30	*	*
	Stonyhurst	48	27	43·0	34·4	38·7	− 0·8	3	27	5	0·46	−0·50	12	18
	Blackpool ℜ	48	27	43·3	33·8	38·6	− 2·6	4	30	4	0·37	−0·26	11	17
	Manchester	47	29	43·2	34·6	38·9	− 1·3	3	27	6	0·30	−0·31	*	*
	Liverpool Obsy (Bidston)	49	30	45·1	34·1	39·6	− 1·7	9	30	5	0·35	−0·11	*	*
	Llandudno ℜ	50	32	47·1	36·9	42·0	− 0·4	14	14	3	0·97	+0·35	19	28
	Holyhead	47	33	44·4	38·9	41·7	− 1·3	7	13	4	1·17	+0·44	*	*
8. ENGLAND, S.W.	Llandovery	51	25	42·9	30·0	36·5	− 5·1	3	43	6	0·86	−0·31	*	*
	Pembroke	46	32	44·4	37·3	40·9	− 2·6	7	18	5	1·25	+0·45	10	15
	Arlington (N. Devon)	47	24	42·9	30·7	36·8	− 4·6	3	40	5	0·51	−0·74	*	*
	Cullompton ℜ	49	23	44·4	30·3	37·4	− 4·7	7	43	6	0·48	−0·35	14	21
	Falmouth	49	33	46·1	38·1	42·1	− 0·9	17	11	6	0·56	−0·61	10	15
	Plymouth	48	29	45·8	34·1	40·0	− 3·5	11	31	5	0·37	−0·49	12	18
	Prawle Point	50	29	45·6	34·3	40·0	− 3·2	10	30	5	0·27	?	*	*
9. IRELAND, N.	Malin Head	49	34	46·3	38·0	42·2	+ 1·8	18	11	6	0·67	?	*	*
	Londonderry	55	31	49·3	36·2	42·8	+ 2·2	30	16	4	0·63	−0·12	*	*
	Mullaghmore	50	32	45·4	37·1	41·3	+ 0·1	10	20	4	0·95	+0·07	*	*
	Belmullet	48	36	45·4	39·4	42·4	− 1·1	14	7	7	1·61	?	*	*
	Markree Castle	50	28	46·4	34·1	40·3	− 0·2	12	31	5	0·56	−0·13	16	24
	Brookeborough	51	28	47·4	34·6	41·0	+ 1·2	15	30	2	0·71	?	*	*
	Armagh	52	28	47·4	36·3	41·9	+ 1·1	15	24	3	0·47	−0·23	22	33
	Donaghadee	48	28	46·0	36·4	41·2	+ 0·1	11	22	3	0·50	−0·18	*	*
	Edgeworthstown	51	26	45·9	36·4	41·2	+ 1·2	11	23	2	0·42	−0·40	*	*
10. IRELAND, S.	Dublin	52	31	48·0	38·1	43·1	+ 1·1	24	11	3	0·58	0·00	23	34
	Parsonstown	52	26	47·1	36·1	41·6	+ 0·7	14	24	4	0·40	−0·22	19	28
	Kilkenny	53	26	48·2	36·6	42·4	+ 1·3	25	15	4	0·54	−0·20	*	*
	Waterford	50	29	46·6	37·8	42·2	− 1·3	19	12	5	0·69	−0·31	*	*
	Roche's Point	50	32	48·0	39·7	43·9	− 0·2	23	6	6	0·73	−0·50	*	*
	Valencia	52	33	48·7	40·3	44·5	− 0·8	25	5	6	0·64	−0·68	23	34
	Killarney	54	25	48·7	35·9	42·3	− 1·3	28	17	5	1·04	?	*	*
	Foynes												*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	36	48·0	40·9	44·5	− 1·5	22	3	6	0·52	−0·24	*	*
	Jersey (Noirmont)	45	28	42·7	35·9	39·3	− 3·2	2	22	5	0·32	−0·36	14	20

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 8.] *New Series.* WEEK ENDING MONDAY, 22ND FEBRUARY, 1886. [*Price 4d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 32.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
				Averages of				For the Week.		Since December 29, 1885.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	45	26	40·9	31·3	36·1	3 below.	0	41	9	− 42	347	+ 92
	1. SCOTLAND, EAST	47	23	38·3	29·4	33·9	5 below.	0	57	21	− 43	399	+ 92
	2. ENGLAND, N.E.	40	20	36·3	31·0	33·7	6 below.	0	58	15	− 51	396	+117
	3. ENGLAND, EAST	42	28	35·4	30·3	32·9	8 below.	0	64	12	− 68	451	+157
	4. MIDLAND COUNTIES	44	23	36·1	30·3	33·3	7 below.	0	61	19	− 73	406	+117
	5. ENGLAND, SOUTH	44	26	37·3	31·8	34·6	7 below.	0	52	38	− 62	341	+115
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	45	27	39·8	33·3	36·6	4 below.	0	38	30	− 48	313	+ 85
	7. ENGLAND, N.W.	46	25	38·5	33·0	35·8	6 below.	0	43	24	− 51	322	+ 92
	8. ENGLAND, S.W.	49	24	39·3	32·4	36·1	7 below.	0	41	47	− 99	290	+156
	9. IRELAND, NORTH	51	25	43·5	33·4	38·5	3 below.	4	32	46	− 61	263	+ 64
	10. IRELAND, SOUTH	51	24	44·1	35·9	40·1	3 below.	6	24	81	− 85	234	+ 98
	— CHANNEL ISLANDS	47	34	43·0	38·5	40·8	4 below.	3	13	100	− 76	104	+ 38

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 32.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	4	4 less.	47	+ 8	7·8	+ 1·2	29	43	87	+13	20	+ 4
	1. SCOTLAND, EAST	6	5	1 more.	36	+ 8	4·0	+ 0·1	11	16	113	− 5	25	− 1
	2. ENGLAND, N.E.	5	4	1 less.	34	+ 5	4·1	+ 0·4	1	1	73	+ 1	16	+ 1
	3. ENGLAND, EAST	2	less than ½	5 less.	35	+ 5	3·4	− 1·3	4	6	113	+16	23	+ 3
	4. MIDLAND COUNTIES	2	1	5 less.	35	+ 5	4·5	− 0·1	3	4	88	+ 2	18	+ 1
	5. ENGLAND, SOUTH	1	less than ½	6 less.	34	+ 4	4·7	− 0·2	3	4	95	+ 9	19	+ 2
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	5	3 less.	40	+ 5	8·0	+ 0·1	3	4	64	−13	14	− 2
	7. ENGLAND, N.W.	4	4	3 less.	38	+ 7	6·5	+ 0·6	1	1	71	− 7	15	− 1
	8. ENGLAND, S.W.	1	less than ½	9 less.	39	+ 6	6·7	− 1·3	7	10	101	0	20	0
	9. IRELAND, NORTH	3	3	4 less.	39	+ 2	7·2	+ 1·2	14	21	78	−21	17	− 3
	10. IRELAND, SOUTH	3	8	1 less.	36	0	6·6	− 0·9	11	15	99	−14	21	− 2
	— CHANNEL ISLANDS	2	1	7 less.	45	+ 8	5·1	− 1·1	9	13	133	−11	26	− 2

General Remarks.

Weather has been gloomy or dull in nearly all parts of the Kingdom, with much haze or fog. Slight showers of cold rain, sleet, and snow have been general over Great Britain; in the south of Ireland some heavy falls of rain were experienced towards the end of the period.

Temperature has been below the mean in all districts, the deficit ranging from 3° in "Scotland, N." and over Ireland, to 6° in "England, N.E." and "England, N.W.", and to 7° or 8° in all the other English districts. The highest of the maxima, which in most places were registered either on the 20th or 21st, varied between 51° in Ireland, 49° in "England, S.W.", and 40° in "England, N.E." Over the greater part of England the daily maxima were generally very low, the thermometer only rising to a few degrees above freezing point. The lowest of the minima, which were recorded on different days in the various districts, ranged from 20° in "England, N.E." to 27° in "Scotland, W." and 34° in the "Channel Islands".

Rainfall has been slightly in excess of the mean in "Scotland, E.", but less elsewhere. Over eastern, central, and southern England the fall has been scarcely appreciable.

Bright sunshine shows a decided increase in "Scotland, N.", but a considerable decrease in all other districts. The percentage of the possible amount of duration in "Scotland, N." was 43, whence it decreased to 21 in "Ireland, N." and to between 1 and 10 at the English stations.

Depressions observed.—During the whole of this period pressure was highest over Scandinavia and lowest over the Bay of Biscay and the south of France; the only depression which appeared over our Islands was a very small and shallow one which was shown over Scotland and the north of England at the end of the week. Moderate to light winds from the Eastward were most prevalent on our coasts, but over Ireland and Scotland a moderate Southerly wind was experienced from the 19th to the 21st.

E 21021. 350.—2/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

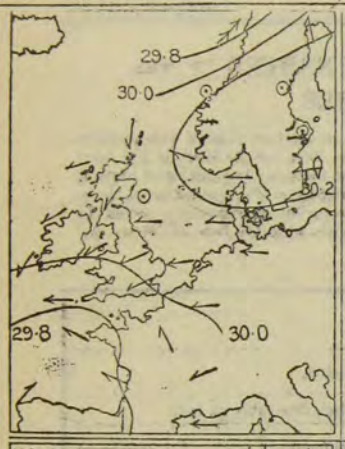
Weather

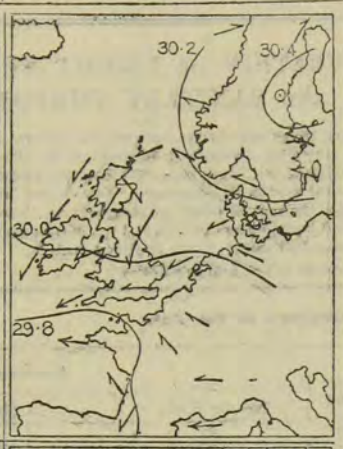
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, February 16.

Weather fine in the northern parts of our Islands and Sweden, but cloudy elsewhere, with fog in many places, and rain in the south of Ireland and west of France. Rain, hail, or snow falling in the north of our Islands later.

Temperature risen a little in the west, but fallen in the east; readings ranging from 43° at Scilly to 25° at Nairn. Frost occurring at night in many parts of the Kingdom.

Wind moderate South-Easterly in France, but Easterly or North-Easterly elsewhere; strong in force at some of our southern stations.

Sea rather rough at the mouth of the Channel.

Barometer falling over Ireland, England, and the Netherlands, but rising elsewhere. Pressure highest in Sweden, with a depression over the Bay of Biscay and another near Bodö. Slight fall taking place generally later.

Wednesday, February 17.

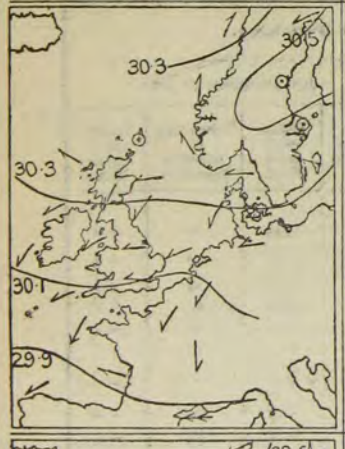
Weather fair at our northern and north-western stations as well as in the west and south of France, but dull elsewhere, with mist or fog in many places.

Temperature changed irregularly; readings ranging from 40° at Scilly and Jersey to 28° at Nairn. Slight frost at night in many parts of Great Britain.

Wind South-Easterly in Scandinavia, but Easterly or North-Easterly elsewhere; light or moderate in force generally.

Sea rather rough at Spurn Head, but moderate to smooth on other parts of our coasts.

Barometer rising generally. Pressure highest over Gulf of Bothnia, with shallow depression over the Bay of Biscay. Rise continuing all day, and depression gradually filling up.



Thursday, February 18.

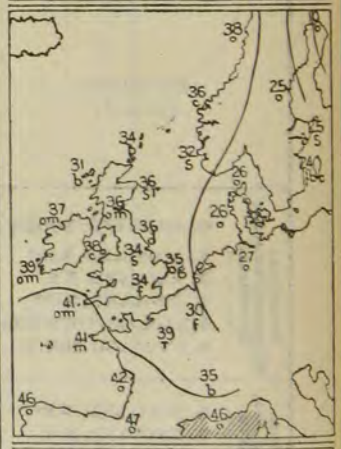
Weather fine on our extreme northern coasts, but cloudy or overcast elsewhere, with fog or mist locally, and sleet in the east of Scotland. Snow or rain falling later at most of our northern stations.

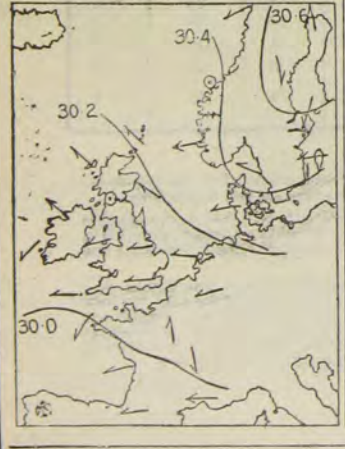
Temperature fallen slightly in Denmark and the Netherlands, but risen elsewhere; readings ranging from 41° at Scilly to 31° at Stornoway. Slight frost at night in many parts of the Kingdom.

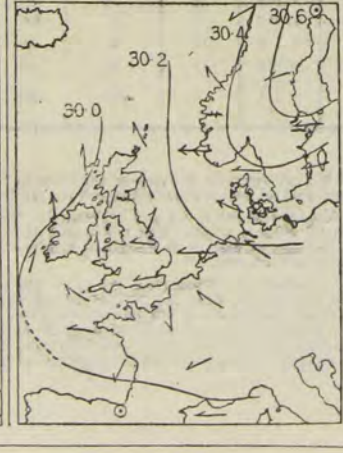
Wind Easterly or North-Easterly, and chiefly light or moderate in force.

Sea moderate to smooth.

Barometer rising generally. Pressure still highest over Gulf of Bothnia, but relatively high to the northward of our Islands, with lowest readings over the south of France and north of Spain. Slight fall taking place later in our Islands and France.







Friday, February 19.

Weather cloudy generally, with fog or mist in many places, and snow in the north and east of Scotland. Some improvement taking place in Ireland later.

Temperature risen slightly in the west and south-west, but fallen elsewhere; readings ranging from 42° at Scilly to 31° at Loughborough, Oxford, and Yarmouth. Slight frost at night in many parts of the Kingdom.

Wind South-Easterly on all our more northern coasts, but Easterly or North-Easterly elsewhere; light or moderate in force generally. Subsequently veering to South in Ireland and Scotland.

Sea rather rough at Aberdeen and Yarmouth, moderate to smooth elsewhere.

Barometer falling at all but the Swedish and French stations, most on our western and northern coasts. Distribution of pressure in morning same as on previous day, but depression subsequently moving northwards outside our extreme western coasts.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

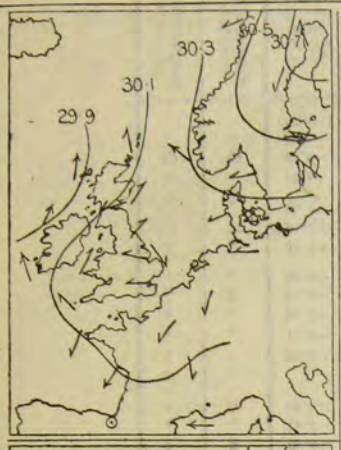
Weather

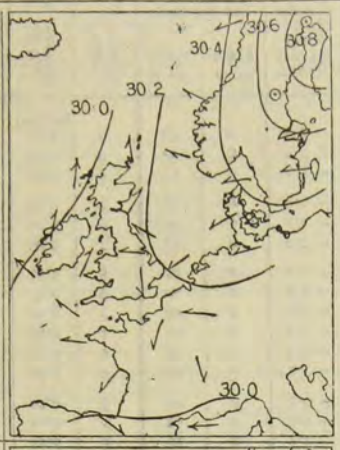
During the 24 hours succeeding 8 a.m. on the dates given.

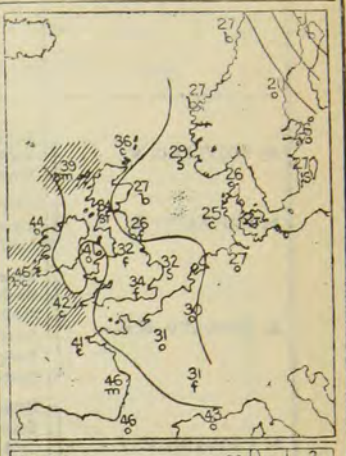
Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.







Saturday, February 20.

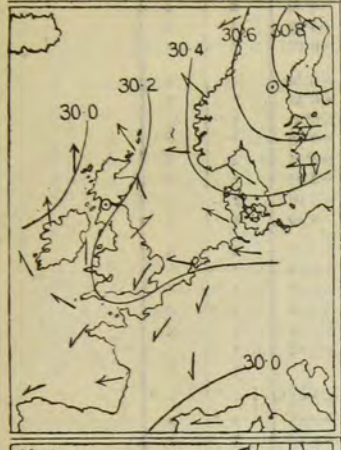
Weather fine in the east of Scotland and west of Ireland, but dull and misty in most other localities, with snow in the south of Norway and some parts of England. Rain falling later at a few of our western stations.

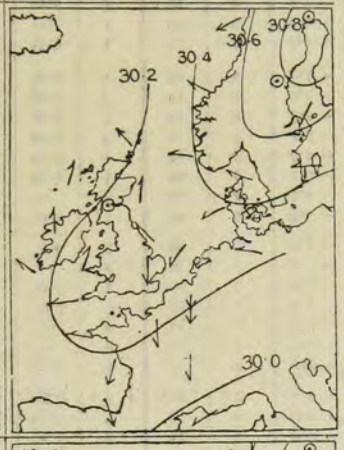
Temperature fallen a little in the east but risen in the west; readings ranging from 46° at Valencia to 26° at Shields. Frost occurring over England at night.

Wind moderate Southerly in Ireland and Scotland, but light North-Easterly at our southern and the French stations.

Sea rough at Scilly and rather rough at Stornoway and Valencia, but moderate to smooth elsewhere.

Barometer falling at all but the English and French stations. Pressure still highest over the Gulf of Bothnia, with relatively low readings over the south of France and our extreme western coasts. Rise taking place generally later.





Sunday, February 21.

Weather varying greatly in different localities, but generally cloudy, with rain at Valencia and sleet showers in the north of England. Rain or sleet falling later at several of the Irish and Scotch stations.

Temperature fallen a little in Sweden, France, and the south of England, but risen elsewhere; readings ranging from 47° at Valencia to 31° at Loughborough and Cambridge. Frost occurring in many parts of the Kingdom at night.

Wind fresh Southerly in Ireland and Scotland, but Easterly or North-Easterly at our southern and most of the Continental stations.

Sea rather rough at Stornoway, moderate to smooth elsewhere.

Barometer rising at all but the southern French stations. Pressure still highest over the Gulf of Bothnia, with relatively low readings over the south-east of France and our extreme western coasts. No important change later.

Monday, February 22.

Weather fine in many parts of Scandinavia, but cloudy or overcast elsewhere, with rain in Scotland, and snow in the north and east of England. Rain falling later at several of our western stations.

Temperature changed irregularly; readings ranging from 46° at Roche's Point to 28° at Dungeness. Slight frost at night in many parts of the Kingdom.

Wind North-Easterly at our extreme western, southern, and many of the continental stations, but very variable on our north and east coasts. Subsequently becoming variable in the south also.

Sea moderate to smooth.

Barometer rising generally. Pressure still highest over the Gulf of Bothnia, but relatively high to the westward of our Islands, with well defined areas of lower readings over and to the northward of Scotland. Slight fall taking place later over England and Ireland.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟩⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 29 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	41	29	39·0	31·4	35·2	− 3·8	0	48	5	0·32	−0·49	*	*
	Stornoway	45	26	42·7	31·1	36·9	− 2·6	2	39	5	0·31	−0·65	29	43
	Wick	44	26	41·0	31·4	36·2	− 2·8	0	41	6	0·46	−0·04	*	*
1. SCOTLAND, E.	Nairn	47	23	39·1	27·9	33·5	− 5·5	0	60	4	0·31	−0·09	*	*
	Aberdeen	39	24	37·9	29·4	33·7	− 4·9	0	58	6	0·58	+0·06	11	16
	Leith	39	26	37·9	30·9	34·4	− 5·4	0	53	7	0·68	+0·29	*	*
2. ENGLAND, N.E.	Alnwick Castle	38	20	36·0	29·9	33·0	− 6·0	0	63	5	0·67	+0·09	*	*
	Durham	38	20	35·6	29·5	32·6	− 6·5	0	66	6	0·49	+0·04	1	1
	Shields	40	26	36·9	31·1	34·0	− 5·8	0	56	5	0·45	+0·05	*	*
	Scarborough ℔	39	29	36·4	32·0	34·2	− 5·5	0	55	4	0·24	−0·21	*	*
	York	39	28	36·4	31·4	33·9	− 5·9	0	57	5	0·51	+0·06	0	0
	Spurn Head	40	30	36·7	32·0	34·4	− 5·3	0	53	4	0·06	?	*	*
3. ENGLAND, E.	Hillington ℔	40	29	35·9	30·8	33·4	− 6·5	0	60	2	0·02	−0·46	6	9
	Yarmouth	36	30	34·9	31·0	33·0	− 8·0	0	63	3	0·09	−0·41	*	*
	Geldeston	38	30	35·9	31·2	33·6	− 7·4	0	59	1	0·03	−0·49	3	4
	Cambridge	42	28	36·1	29·1	32·6	− 8·2	0	66	1	0·01	−0·39	4	6
	Rothamsted	36	28	34·1	29·5	31·8	− 8·2	0	71	1	0·01	−0·57	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	41	24	36·0	30·3	33·2	− 7·4	0	62	5	0·32	−0·10	4	6
	Loughborough	43	23	36·7	30·0	33·4	− 6·9	0	60	2	0·03	−0·46	*	*
	Leicester	40	29	35·9	31·0	33·5	− 6·8	0	60	1	0·01	−0·49	1	1
	Cheadle ℔	36	27	34·3	29·7	32·0	− 7·7	0	70	2	0·04	−0·66	*	*
	Churchstoke ℔	43	31	37·9	31·5	34·7	− 6·0	0	51	4	0·16	−0·54	4	6
	Hereford ℔	44	28	38·5	30·4	34·5	− 6·7	0	53	1	0·01	−0·59	*	*
	Cirencester	37	26	34·6	29·3	32·0	− 8·2	0	70	0	—	−0·69	1	1
	Oxford	39	27	35·0	30·4	32·7	− 8·3	0	65	1	0·01	−0·49	3	4
5. ENGLAND, S.	London†	39	28	37·1	32·1	34·6	− 7·2	0	52	1	0·01	−0·46	0	0
	Strathfield Turgiss ℔	40	27	36·4	31·0	33·7	− 7·8	0	58	0	—	−0·55	*	*
	Dungeness	39	26	37·4	33·3	35·4	− 7·0	0	46	1	0·06	−0·46	*	*
	Hastings (St. Leonard's)	38	26	36·8	32·2	34·5	− 7·6	0	53	2	0·02	−0·49	4	6
	Southampton	43	28	38·8	31·9	35·4	− 6·4	0	46	0	—	−0·70	4	6
	Hurst Castle	44	28	?39·4	32·3	?35·9	−?6·8	0	?43	0	—	−0·62	*	*
	Stowell ℔	40	28	35·5	30·1	32·8	− 8·7	0	64	1	0·01	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	45	27	41·1	32·4	36·8	− 3·2	0	36	4	0·29	−1·85	*	*
	Glasgow	40	31	37·1	32·9	35·0	− 4·6	0	49	5	0·70	−0·20	4	6
	Ardrossan	42	30	39·7	32·6	36·2	− 3·5	0	41	3	0·42	−0·43	*	*
	Douglas (Isle of Man)	45	30	41·3	35·1	38·2	− 3·3	0	27	3	0·55	−0·35	1	1
7. ENGLAND, N.W.	Newton Reigny (Penrith)	40	25	36·2	30·4	33·3	−10·4	0	61	4	0·48	−0·27	1	1
	Barrow-in-Furness	40	32	37·6	33·3	35·5	− 6·0	0	46	5	0·78	+0·10	*	*
	Stonyhurst	40	29	38·2	31·9	35·1	− 4·7	0	48	3	0·38	−0·57	0	0
	Blackpool ℔	42	30	38·5	33·0	35·8	− 5·7	0	43	4	0·50	−0·11	0	0
	Manchester	38	31	36·4	32·4	34·4	− 6·2	0	53	3	0·28	−0·31	*	*
	Liverpool Obsy (Bidston)	45	31	38·7	32·1	35·4	− 6·1	0	46	3	0·11	−0·43	*	*
	Llandudno ℔	44	32	41·0	34·4	37·7	− 4·8	0	30	4	0·28	−0·30	1	1
	Holyhead	46	34	41·6	36·1	38·9	− 4·1	0	22	3	0·50	−0·19	*	*
8. ENGLAND, S.W.	Llandovery	49	28	41·6	30·7	36·2	− 6·0	0	41	1	0·07	−1·04	*	*
	Pembroke	44	32	40·3	35·6	38·0	− 6·0	0	28	1	0·13	−0·65	6	9
	Arlington (N. Devon)	44	26	37·8	29·7	33·9	− 7·9	0	57	0	—	−1·22	*	*
	Cullompton ℔	42	24	37·2	29·5	33·4	− 8·9	0	60	0	—	−0·83	5	7
	Falmouth	45	35	41·4	36·2	38·8	− 5·2	0	22	1	0·01	−1·07	5	7
	Plymouth	45	28	40·8	32·2	36·5	− 7·4	0	39	1	0·01	−0·81	11	15
	Prawle Point	43	31	39·0	33·0	36·0	− 7·5	0	42	1	0·01	?	*	*
9. IRELAND, N.	Malin Head	48	32	43·1	35·7	39·4	− 1·3	3	23	5	0·49	?	*	*
	Londonderry	51	29	44·5	33·4	39·0	− 1·7	7	32	3	0·62	−0·08	*	*
	Mullaghmore	51	29	44·6	35·1	39·9	− 1·3	7	26	3	0·23	−0·64	*	*
	Belmullet	49	33	44·9	36·3	40·6	− 2·9	8	22	3	0·35	?	*	*
	Markree Castle	50	25	43·5	30·7	37·1	− 3·4	4	41	3	0·22	−0·45	19	28
	Brookeborough	50	27	43·1	31·1	37·1	− 2·7	3	39	1	0·24	?	*	*
	Armagh	49	29	43·2	32·6	37·9	− 3·5	3	34	3	0·23	−0·40	9	13
	Donaghadee	46	28	41·9	33·3	37·6	− 3·8	0	31	5	0·22	−0·43	*	*
	Edgeworthstown	50	29	42·9	32·3	37·6	− 2·6	3	35	2	0·12	−0·70	*	*
10. IRELAND, S.	Dublin	49	29	43·5	34·8	39·2	− 3·3	4	27	5	0·22	−0·33	15	21
	Parsonstown	51	24	43·6	32·0	37·8	− 3·5	4	36	2	0·18	−0·41	9	13
	Kilkenny	50	31	43·4	34·6	39·0	− 2·5	4	27	3	0·65	−0·05	*	*
	Waterford	48	35	43·3	36·8	40·1	− 3·9	4	19	3	0·83	−0·07	*	*
	Roche's Point	51	33	46·0	38·3	42·2	− 2·0	17	10	2	0·93	−0·21	*	*
	Valencia	50	33	45·0	38·9	42·0	− 3·4	8	9	4	1·67	+0·39	8	11
	Killarney	49	29	44·2	36·2	40·2	− 3·6	6	22	4	1·02	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	47	37	44·6	39·3	42·0	− 4·0	7	8	2	0·10	−0·63	*	*
	Jersey (Noirmont)	43	34	41·3	37·6	39·5	− 3·0	0	18	1	0·01	−0·66	9	13

Stations marked ℔ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

Note.—The Returns from Foynes have now ceased.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 9.] *New Series.* WEEK ENDING MONDAY, 1st MARCH, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 36.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
				Averages of				For the Week.		Since December 29, 1885.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	42	16	37·4	29·2	33·3	6 below.	0	61	9	− 52	408	+124
	1. SCOTLAND, EAST	40	21	36·5	27·9	32·2	7 below.	0	69	21	− 59	468	+131
	2. ENGLAND, N.E.*	44	22	36·5	28·7	32·6	7 below.	0	66	15	− 66	462	+159
	3. ENGLAND, EAST	45	21	35·6	27·2	31·5	9 below.	0	74	12	− 88	525	+208
	4. MIDLAND COUNTIES	43	22	36·5	26·6	31·6	9 below.	0	73	19	− 96	479	+169
	5. ENGLAND, SOUTH	45	22	37·9	28·4	33·2	9 below.	0	62	38	− 86	403	+161
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	40	21	37·3	29·9	33·6	7 below.	0	59	30	− 63	372	+123
	7. ENGLAND, N.W.	41	19	36·2	27·6	32·0	9 below.	0	70	24	− 68	392	+146
	8. ENGLAND, S.W.	50	24	40·7	31·0	35·9	8 below.	0	43	47	−127	333	+189
	9. IRELAND, NORTH	46	21	38·1	31·3	34·7	7 below.	0	51	46	− 83	314	+ 99
	10. IRELAND, SOUTH	52	26	41·8	33·7	37·8	6 below.	0	29	81	−116	263	+120
	— CHANNEL ISLANDS	52	30	43·1	36·0	39·6	5 below.	3	22	103	−101	126	+ 57

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 36.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	3	4 less.	52	+ 4	8·1	+ 0·8	30	42	117	+24	22	+ 5
	1. SCOTLAND, EAST	4	4	1 less.	40	+ 8	4·4	+ 0·1	8	11	121	−15	23	− 3
	2. ENGLAND, N.E.*	6	7	2 more.	40	+ 7	4·8	+ 0·6	19	27	92	+ 3	17	+ 1
	3. ENGLAND, EAST	4	5	0 (average)	39	+ 4	3·9	− 1·3	11	15	124	+ 5	22	+ 1
	4. MIDLAND COUNTIES	2	5	0 (average)	37	+ 3	5·0	− 0·1	14	19	102	− 5	18	− 1
	5. ENGLAND, SOUTH	2	3	2 less.	36	+ 2	5·0	− 0·5	7	10	102	− 7	18	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	1	1	7 less.	42 †	+ 2	8·3 †	− 0·4	16	22	80	−11	15	− 2
	7. ENGLAND, N.W.	2	5	2 less.	40	+ 4	7·0	+ 0·5	18	24	89	− 8	16	− 2
	8. ENGLAND, S.W.	3	7	2 less.	42	+ 4	7·4	− 1·5	9	12	110	0	19	0
	9. IRELAND, NORTH	4	5	2 less.	43	+ 1	7·7	+ 1·0	8	11	86	−25	16	− 4
	10. IRELAND, SOUTH	4	10	2 more.	40	− 1	7·6	− 0·7	11	15	110	−19	20	− 3
	— CHANNEL ISLANDS	5	8	2 more.	50	+ 9	5·9	− 1·0	12	16	145	−23	25	− 3

General Remarks.

Weather has continued dull and gloomy in nearly all parts of the Kingdom. Snow showers have fallen daily on our north-east coasts, and at the close of the week very heavy snowstorms were experienced in all the more northern and eastern districts and heavy sleet or rain in the south and south-west.

Temperature has been even lower than that reported during the four preceding weeks, and the deficit below the mean value over England (8° or 9° in most districts) has not been so large since the week ending 26th March 1883. Over Ireland and Scotland and in "England, N.E." the deficit has been 6° or 7°, and in the "Channel Islands" 5°. The highest of the maxima, which were recorded on various days in the different parts of the country, ranged from 40° in the east and west of Scotland, to 52° in the south of Ireland and at Scilly. During the greater part of the week the daily maxima were only a few degrees above freezing point, excepting in the extreme west and south-west. The lowest of the minima, which were also registered on irregular dates, ranged from 16° in "Scotland, N." (at Wick) and 19° in "England, N.W.", to 22° over southern, central, and north-eastern England, 24° in "England, S.W.", 26° in "Ireland, S.", and 30° in the "Channel Islands".

Rainfall has been a little more than the mean in the north-east of England, the south of Ireland, and in the "Channel Islands", but less in most other districts.

Bright sunshine has been rather more prevalent than it was last week, but still very deficient generally. The percentages of the possible amount of duration varied between 10 and 27 in most districts, but in "Scotland, N." 42 % was recorded.

Depressions observed.—The distribution of barometric pressure over our Islands continued anticyclonic until towards the end of the period, when a well defined and deep depression approached our south-west coasts from the Atlantic, and, travelling very slowly east-north-eastwards, caused the wind, which had previously been light or moderate from between east and north-east, to increase to a moderate to fresh Easterly gale over the north of England and Ireland, and to a fresh to whole South-Easterly gale at our south-western stations.

* The values in this district are liable to alteration owing to the non-arrival of the Return from Alnwick Castle.
† These values have been altered slightly owing to the receipt of further information.

E 21168. 350.—3/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

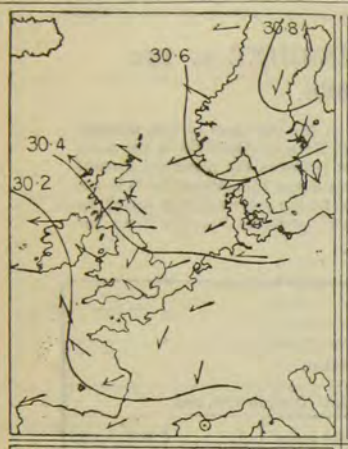
Weather

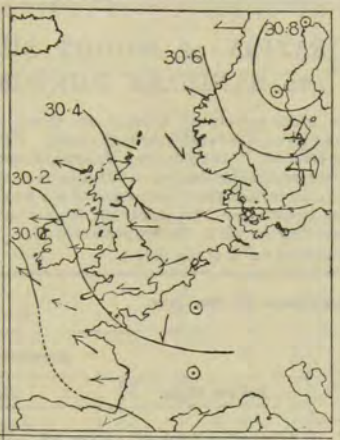
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, February 23.

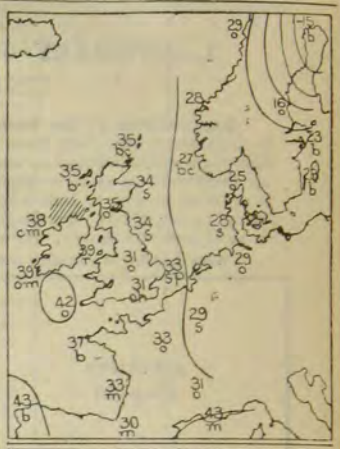
Weather fine in the north of Scotland and west of Norway, but cloudy elsewhere, with rain at many of our western stations and snow showers in the east. No important change later.

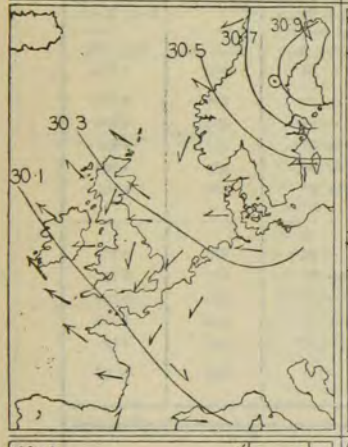
Temperature fallen in most parts of our Islands; readings ranging from 42° at Roche's Point and Scilly to 31° over Central England. Sharp frost occurring at night in many places.

Wind chiefly Easterly—inclining to North-East in the east and south and to South-East in the west and north; strong in force in the north of Ireland. Subsequently increasing from South-East on our south-west coasts.

Sea rough at Malin Head; moderate to smooth elsewhere.

Barometer falling in England, Ireland, and France, but rising in Scotland and Scandinavia. Pressure highest over the Gulf of Bothnia, and relatively low to the south-westward of our Isles and the south-eastward of France, but intervening gradients moderate. Fall subsequently becoming general.





Wednesday, February 24.

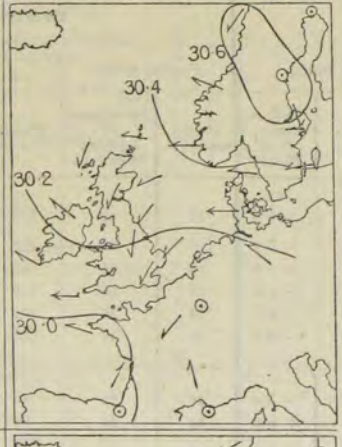
Weather varying greatly in different localities, but cloudy in most places, with showers of hail or snow on our east coasts. No important change later.

Temperature fallen generally; readings ranging from 41° at Roche's Point to 25° at Oxford. Sharp frost occurring at night, the lowest minima being 16° at Wick and 22° at Nairn.

Wind North-Easterly over our midland and south-eastern counties, but Easterly or South-Easterly elsewhere; strong in force on our extreme south-west coasts.

Sea rather rough in the south-west as well as at Aberdeen.

Barometer falling at all but the Swedish stations. Pressure still highest over the Gulf of Bothnia, with an area of relatively low readings to the south-westward of our Islands. No important change later.



Thursday, February 25.

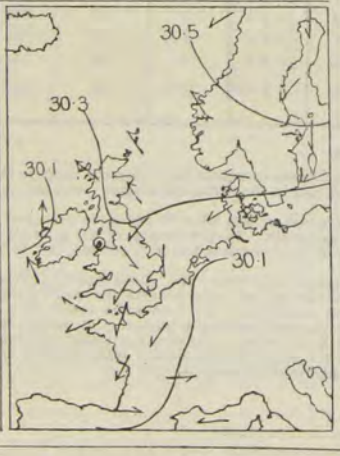
Weather fine over the greater part of Scandinavia as well as on our north and north-west coasts, but cloudy elsewhere, with snow showers in the north and north-east of England. Snow showers in east of Scotland later.

Temperature risen a few degrees over England and the west of France, but fallen elsewhere; readings ranging from 40° at Scilly to 18° at Wick. Sharp frost at night in most parts of the Kingdom.

Wind light and variable in the east of Scotland, but light to fresh from the Eastward in most other localities. Easterly breezes subsequently setting in on our northern coasts.

Sea rather rough at the mouth of the Channel, and rough (a "ground swell") at Wick, but moderate to smooth elsewhere.

Barometer rising at all but the Swedish stations. Pressure still highest over the Gulf of Bothnia, with an area of relatively low readings over the Bay of Biscay. Slight fall taking place later in France and the south-east of England.



Friday, February 26.

Weather fair over the greater part of our Islands and also at several of the Continental stations, but snow showers reported on the north-east coasts of Great Britain, and steady snow over the Netherlands and north-east of France.

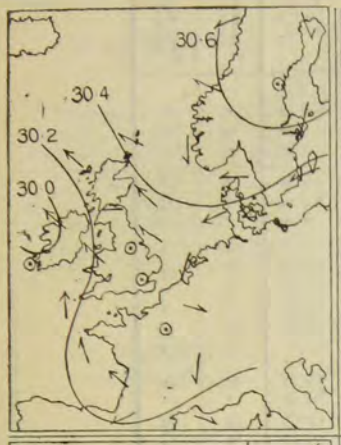
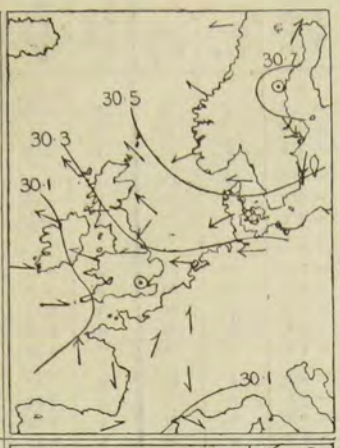
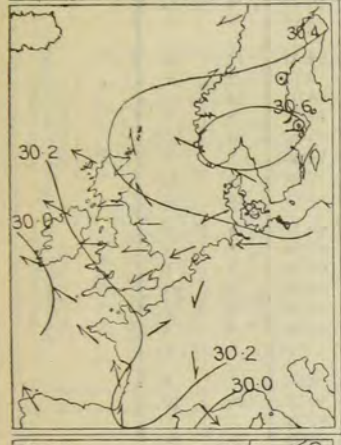
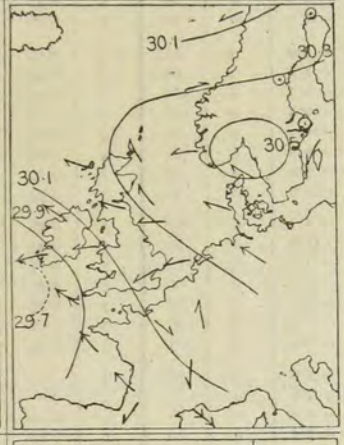
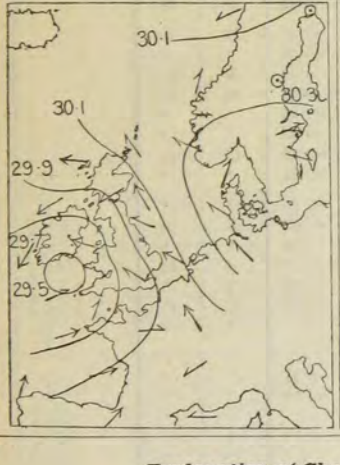
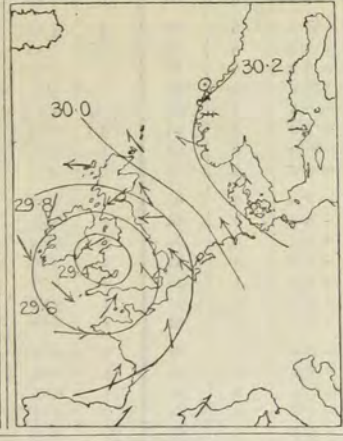
Temperature fallen a few degrees in the east and south; readings ranging from 38° at Valencia, Roche's Point, and Scilly to 23° at Nairn. Frost again occurring at night in many parts of the Kingdom.

Wind South-Easterly on our extreme north and north-west coasts, but varying between East and North elsewhere, light or moderate in force generally. Subsequently increasing to strong breeze or moderate gale from South-East in the west of Ireland.

Sea moderate to smooth.

Barometer falling in Scandinavia and Denmark, but rising elsewhere. Pressure highest in the north of Sweden and lowest in the south of France. Shallow depression subsequently appearing off the west of Ireland, and barometer falling at most of our western stations.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, February 27.** *Weather* cloudy generally, with thick fog over central England and snow on our north-east coasts as well as at Malin Head. Snow showers falling later at most of our northern and eastern stations. *Temperature* risen a few degrees in the west and north; readings ranging from 45° at Roche's Point and Scilly to 26° at York, Loughborough, Cambridge, and Dungeness. Sharp frost occurring at night in many parts of the Kingdom. *Wind* fresh South-Easterly on our western and northern coasts, but calms or variable airs prevailing in the south-east. Subsequently falling light and variable in the extreme south-west. *Sea* rather rough at Stornoway, Aberdeen, and Scilly, moderate to smooth elsewhere. *Barometer* rising at all but our western stations. Pressure highest over the Gulf of Bothnia, but relatively high over France, with a shallow depression off the west of Ireland. Slight rise taking place in west later.	
		**Sunday, February 28.** *Weather* cloudy or overcast generally, with showers of snow or hail over the eastern parts of Great Britain. Steady rain setting in on our south-west coasts later. *Temperature* changed irregularly; readings ranging from 45° at Scilly to 28° at Oxford. Maximum at many of the English stations not exceeding 32°. *Wind* South-Westerly in the north of Scandinavia and Southerly in the south-west of France, but Easterly and South-Easterly elsewhere; fresh or strong in force on our western and northern coasts. Subsequently increasing to gale in the south-west. *Sea* rough at Pembroke and rather rough on several of the more exposed parts of our coasts. *Barometer* falling a little in Scandinavia, France, and the south-west of our Islands, but rising elsewhere. Pressure highest in the south of Scandinavia, with relatively low readings at our extreme south-western stations. Brisk fall subsequently taking place in south-west.	
		**Monday, March 1.** *Weather* fine in Sweden and the Netherlands, but cloudy or overcast elsewhere, with snow in many parts of the United Kingdom, and rain in the west of France. Rain subsequently extending to our southern coasts, but heavy snow falling in the north all day. *Temperature* fallen several degrees in the west, but risen a little in the south-west; readings ranging from 49° at Scilly to 29° at Holyhead, Liverpool, Loughborough, and Oxford. Maximum at many of the northern stations not exceeding 32°. *Wind* fresh South-Westerly over the Bay of Biscay and mouth of the Channel, but strong to a gale from South-East on our eastern coasts, and from East or North-East in the west. Subsequently veering to North-West at our south-western stations. *Sea* rough, or rather so, on nearly all parts of our coasts. *Barometer* fallen generally. Pressure highest over Denmark and the south of Scandinavia, with a deep and well defined depression near the mouth of the St. George's Channel. Depression subsequently moving slowly eastwards, and barometer beginning to rise again in south-west.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 33 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	38	25	36·3	28·4	32·4	− 6·6	0	67	7	0·20	−0·59	*	*
	Stornoway	42	29	39·7	31·7	35·7	− 4·0	0	44	0	—	−0·92	30	42
	Wick	38	16	36·3	27·4	31·9	− 7·1	0	71	7	0·65	+0·25	*	*
1. SCOTLAND, E.	Nairn	39	21	36·4	25·3	30·9	− 8·6	0	78	1	0·05	−0·34	*	*
	Aberdeen	40	24	36·3	29·0	32·7	− 6·2	0	65	7	0·83	+0·22	8	11
	Leith	40	27	36·9	29·3	33·1	− 7·1	0	62	4	0·27	−0·10	*	*
2. ENGLAND, N.E.	Alnwick Castle												*	*
	Durham	44	22	37·5	26·2	31·9	− 7·4	0	71	6	0·45	0·00	15	21
	Shields	40	25	36·9	29·9	33·4	− 6·5	0	60	6	0·76	+0·36	*	*
	Scarborough ℜ	39	28	36·0	30·4	33·2	− 6·5	0	62	6	0·74	+0·30	*	*
	York	39	25	36·7	27·3	32·0	− 8·1	0	70	4	0·90	+0·45	23	32
	Spurn Head	37	28	35·4	29·9	32·7	− 7·0	0	65	7	0·52	?	*	*
3. ENGLAND, E.	Hillington ℜ	45	23	36·8	26·8	31·8	− 8·4	0	71	7	0·65	+0·20	12	16
	Yarmouth	36	28	34·4	29·9	32·2	− 8·8	0	69	3	0·52	+0·02	*	*
	Geldeston	41	25	36·1	28·2	32·2	− 8·9	0	69	4	0·34	−0·06	10	14
	Cambridge	41	21	37·6	24·7	31·2	− 9·6	0	76	3	0·52	+0·14	10	14
	Rothamsted	38	22	33·3	26·6	30·0	−10·6	0	84	3	0·25	−0·27	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	40	23	37·1	26·9	32·0	− 9·0	0	70	4	0·07	−0·33	17	23
	Loughborough	43	24	38·3	27·3	32·8	− 8·0	0	64	2	0·46	0·00	*	*
	Leicester	43	24	37·0	27·5	32·3	− 8·4	0	68	1	0·42	−0·05	12	16
	Cheadle ℜ	39	24	35·1	25·9	30·5	− 9·3	0	81	2	1·11	+0·48	*	*
	Churchstoke ℜ	39	22	35·1	25·3	30·2	−10·4	0	83	2	0·42	−0·18	16	22
	Hereford ℜ	41	25	37·6	27·7	32·7	− 8·8	0	65	3	0·58	+0·03	*	*
	Cirencester	38	22	35·3	26·1	30·7	− 9·9	0	79	2	0·51	−0·09	15	20
	Oxford	40	24	36·4	26·0	31·2	−10·0	0	76	2	0·34	−0·11	10	14
5. ENGLAND, S.	London†	40	25	36·1	28·0	32·1	− 9·9	0	69	2	0·27	−0·16	4	5
	Strathfield Turgiss ℜ	40	22	36·1	25·7	30·9	−11·0	0	78	2	0·43	−0·05	*	*
	Dungeness	43	24	38·1	28·3	33·2	− 9·5	0	62	1	0·17	−0·33	*	*
	Hastings (St. Leonard's)	39	28	36·5	29·6	33·1	− 9·3	0	62	2	0·23	−0·25	8	11
	Southampton	45	26	39·7	29·0	34·4	− 7·7	0	53	2	0·51	−0·14	10	14
	Hurst Castle	45	28	41·1	30·0	35·6	− 7·2	0	45	2	0·53	−0·03	*	*
	Stowell ℜ	45	25	37·7	27·9	32·8	− 9·0	0	64	3	0·27	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	40	27	38·0	31·1	34·6	− 5·6	0	52	0	—	−2·05	*	*
	Glasgow	39	21	36·3	27·4	31·9	− 7·9	0	71	0	—	−0·77	12	17
	Ardrossan	40	26	37·6	29·4	33·5	− 6·5	0	60	1	0·02	−0·75	*	*
	Douglas (Isle of Man)	40	28	37·1	31·7	34·4	− 7·4	0	53	1	0·37	−0·44	19	26
7. ENGLAND, N.W.	Newton Reigny (Penrith)	36	19	34·5	23·3	28·9	−10·1	0	92	3	0·13	−0·55	18	25
	Barrow-in-Furness	39	27	36·6	29·0	32·8	− 8·9	0	64	2	0·29	−0·35	*	*
	Stonyhurst	38	24	36·0	26·0	31·0	− 9·0	0	77	2	0·52	−0·38	19	26
	Blackpool ℜ	38	33	35·7	26·4	31·1	−10·6	0	76	2	0·25	−0·32	18	25
	Manchester	38	25	35·7	27·4	31·6	− 9·3	0	73	2	0·54	−0·03	*	*
	Liverpool Obs† (Bidston)	38	27	36·1	29·0	32·6	− 8·9	0	66	2	0·68	+0·25	*	*
	Llandudno ℜ	40	25	37·4	28·1	32·8	−10·0	0	64	3	0·98	+0·46	15	21
	Holyhead	41	29	37·9	31·6	34·8	− 8·3	0	50	3	0·65	+0·05	*	*
8. ENGLAND, S.W.	Llandovery	46	23	39·6	26·6	33·1	− 9·4	0	62	3	0·40	−0·65	*	*
	Pembroke	43	31	39·0	33·0	36·0	− 8·0	0	42	3	0·63	−0·09	13	18
	Arlington (N. Devon)	43	25	38·6	28·3	33·5	− 9·4	0	60	3	0·64	−0·44	*	*
	Cullompton ℜ	49	24	39·9	28·6	34·3	− 8·2	0	54	3	0·72	−0·06	9	12
	Falmouth	50	31	42·2	35·6	38·9	− 5·4	1	23	6	1·34	+0·39	4	5
	Plymouth	50	29	42·8	32·1	37·5	− 6·5	3	35	3	0·82	+0·08	10	14
	Prawle Point	48	39	42·6	33·1	37·9	− 5·6	2	32	3	0·38	?	*	*
9. IRELAND, N.	Malin Head	40	29	37·7	31·4	34·6	− 6·4	0	52	3	0·05	?	*	*
	Londonderry	43	28	39·8	31·1	35·5	− 5·4	0	46	3	0·43	−0·25	*	*
	Mullaghmore	42	29	39·0	32·9	36·0	− 5·2	0	42	3	0·25	−0·38	*	*
	Belmullet	46	30	40·3	32·9	36·6	− 7·1	0	38	5	0·82	?	*	*
	Markree Castle	41	21	38·0	28·2	33·1	− 7·6	0	62	5	0·44	−0·19	10	14
	Brookeborough	41	26	37·7	30·5	34·1	− 5·8	0	55	4	0·38	?	*	*
	Armagh	39	29	36·8	31·7	34·3	− 7·5	0	54	5	0·50	−0·09	5	7
	Donaghadee	38	30	36·9	33·1	35·0	− 6·8	0	49	5	0·40	−0·18	*	*
	Edgeworthstown	41	24	37·0	29·9	33·5	− 6·9	0	60	2	0·80	+0·01	*	*
10. IRELAND, S.	Dublin	42	32	39·6	34·2	36·9	− 5·6	0	36	4	0·88	+0·33	7	10
	Parsonstown	45	26	40·3	30·3	35·3	− 6·5	0	47	4	0·36	−0·19	8	11
	Kilkenny	46	31	39·1	32·2	35·7	− 6·1	0	44	5	0·73	+0·08	*	*
	Waterford	45	32	40·3	34·4	37·4	− 6·6	0	32	4	0·90	+0·10	*	*
	Roche's Point	51	33	44·4	36·1	40·3	− 4·0	7	23	3	1·70	+0·72	*	*
	Valencia	52	31	45·4	36·0	40·7	− 4·7	10	23	5	1·35	+0·20	17	23
	Killarney	49	31	43·4	33·0	38·2	− 5·8	4	32	4	1·19	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	36	46·1	38·6	42·4	− 3·6	17	10	6	0·80	+0·14	*	*
	Jersey (Noirmont)	49	30	40·1	33·4	36·8	− 5·8	0	36	3	0·80	+0·18	12	16

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 10.] *New Series.* WEEK ENDING MONDAY, 8TH MARCH, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 40.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	24	37·0	27·9	32·3	7 below.	0	68	9	− 62	476	+162
	1. SCOTLAND, EAST	43	22	37·9	27·0	32·3	7 below.	0	68	21	− 82	536	+176
	2. ENGLAND, N.E.	42	15	36·9	27·0	31·8	8 below.	0	71	15	− 91	533	+209
	3. ENGLAND, EAST	44	18	37·5	26·6	31·9	9 below.	0	71	12	−118	596	+258
	4. MIDLAND COUNTIES	45	11	37·9	23·9	30·7	10 below.	0	79	19	−126	558	+227
	5. ENGLAND, SOUTH	45	18	40·0	27·0	33·3	9 below.	0	61	38	−118	464	+206
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	43	21	37·7	28·1	32·7	8 below.	0	65	30	− 83	437	+173
	7. ENGLAND, N.W.	42	10	36·9	23·5	31·6	10 below.	0	73	24	− 89	465	+204
	8. ENGLAND, S.W.	45	15	39·4	28·7	33·9	9 below.	0	57	47	−157	390	+235
	9. IRELAND, NORTH	46	20	40·2	23·7	34·3	7 below.	0	54	46	−109	368	+138
	10. IRELAND, SOUTH	47	16	40·8	29·3	34·9	8 below.	0	50	81	−149	313	+159
	— CHANNEL ISLANDS	43	31	41·0	35·4	38·1	6 below.	0	27	103	−136	153	+ 79

Rainfall. **Bright Sunshine.**

	DISTRICTS. (See p. 40.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	4	4 less.	57	+ 7	8·5	+ 0·5	16	21	133	+19	23	+ 4
	1. SCOTLAND, EAST	4	2	3 less.	44	+ 8	4·6	− 0·2	21	28	142	−16	24	− 2
	2. ENGLAND, N.E.	3	4	0 (average)	43	+ 7	5·2	+ 0·6	28	37	120	+11	19	+ 2
	3. ENGLAND, EAST	3	2	3 less.	42	+ 4	4·1	− 1·5	19	24	143	0	23	0
	4. MIDLAND COUNTIES	1	1	3 less.	38	+ 1	5·1	− 0·5	29	37	131	+ 2	21	+ 1
	5. ENGLAND, SOUTH	2	2	3 less.	38	+ 2	5·2	− 0·7	28	37	136	0	20	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	1	6 less.	45	0	8·4	− 1·0	23	30	103	−10	17	− 1
	7. ENGLAND, N.W.	2	1	5 less.	42	+ 2	7·1	+ 0·1	28	37	117	+ 2	19	+ 1
	8. ENGLAND, S.W.	3	2	6 less.	45	+ 3	7·6	− 2·1	26	34	136	−11	21	− 2
	9. IRELAND, NORTH *	2	1	5 less.	45	− 2	7·8	+ 0·5	19	25	105	−25	17	− 4
	10. IRELAND, SOUTH	1	2	5 less.	41	− 4	7·8	− 1·2	33	43	143	−12	23	− 1
	— CHANNEL ISLANDS	5	9	4 more.	55	+ 9	6·8	− 0·6	28	36	173	−21	26	− 3

General Remarks.

Weather has been considerably brighter than of late excepting on the north-west coast of Scotland. Very little rain or snow was experienced generally, but as the period commenced heavy snow was falling over Scotland and the northern counties of England, and at the close of the week some rather large amounts of rain were measured on our extreme south-west coasts.

Temperature has continued extremely low in all parts of the Kingdom, the deficit ranging from 7° or 8° in Ireland and Scotland, to 9° or 10° in nearly all the English districts. The maxima, which were recorded on irregular dates, ranged from 42° in "England, N.E." and "England, N.W.", to 47° in "Ireland, S." The lowest of the minima, which were registered on the 4th in Ireland and on the 7th or 8th at the English and Scotch stations, were abnormally low for the season. At Tean, Stoke-on-Trent, the sheltered thermometer fell to 7°, at Worksop to 8°, at Newton Reigny to 10°, and at Bawtry to 11°, while in most other of the more central parts of England and also in "Ireland, S." readings below 20° were registered. Thermometers exposed on the grass fell several degrees lower than the readings quoted; thus, at Newton Reigny a reading of 2° was recorded, while at Worksop an instrument exposed on the snow descended to − 5°. At some of our north-western stations the mean temperature for this week was lower than at any time during the winter.

Rainfall has been more than the mean in the "Channel Islands", but less in nearly all other districts.

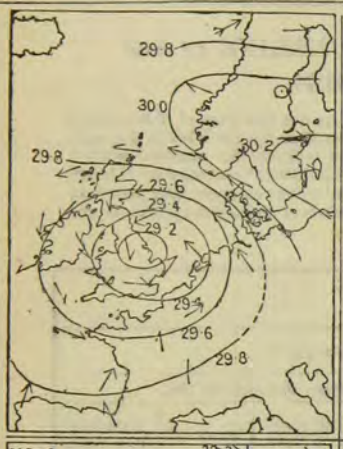
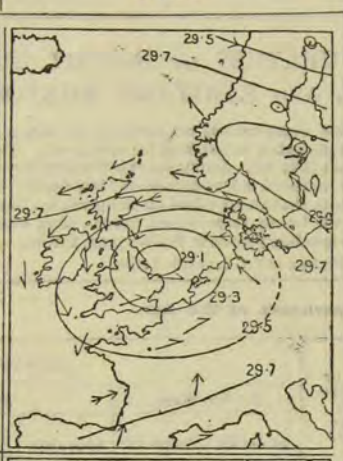
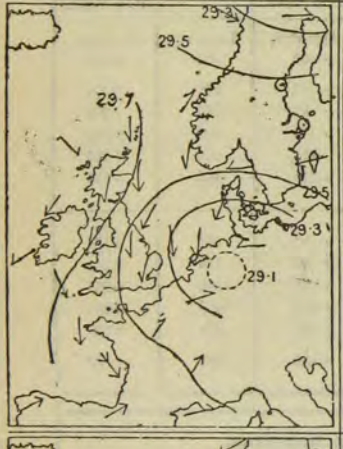
Bright sunshine shows a decided increase excepting in the extreme north, the percentages of the possible duration ranging from 21 in "Scotland, N." to 43 in "Ireland, S."

Depressions observed.—At the commencement of the period the depression which appeared on our south-west coasts towards the end of last week was observed over the east of England, whence it travelled east-south-eastwards to the Netherlands and finally disappeared over Germany and the Baltic. Fresh to strong Northerly winds were experienced over our Islands in the rear of this disturbance during the 2nd and 3rd, but by the 4th they had fallen light, and in the northern districts Westerly breezes had appeared. The next depression reached our neighbourhood at 8 A.M. on the 5th when it lay near the Scilly Islands; thence it moved south-eastwards over France and disappeared over the Mediterranean. This depression brought Easterly and North-Easterly winds to most of our coasts, and in the south they blew with the force of a gale. At the close of the period other depressions were approaching our western coasts from the Atlantic and the wind was blowing strongly from the south-eastward.

* The values in this district are liable to alteration owing to the non-arrival of the Return from Londonderry.

— —3/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, March 2.** *Weather* fair at our southern and south-western stations, but dull elsewhere, with rain in some parts of France and heavy snow over the north of our Islands. Snow continuing in north all day. *Temperature* risen over England and France, but fallen considerably on our west and south-west coasts; readings ranging from 41° at Jersey to 29° at Ardrossan and 25° at Parsonstown. Frost occurring in most places at night. *Wind* fresh from West on our southern coasts, but very strong from East in Scotland and moderate to strong from North-East and North in Ireland. Subsequently increasing to fresh gale in east of Scotland. *Sea* very high at Aberdeen, and rough on nearly all the more exposed parts of our coasts. *Barometer* rising in the west and south, but falling elsewhere. Pressure highest over the Baltic, with centre of a well-defined and rather deep depression near the mouth of the Humber. Depression subsequently moving slowly eastwards, and barometer rising in most parts of our Islands.	
		**Wednesday, March 3.** *Weather* fair at several of our western and northern stations, but unsettled elsewhere, with snow in many parts of Great Britain as well as at Cuxhaven and Paris, and rain in the south of France. Improvement taking place over Great Britain later. *Temperature* risen a little in Ireland and Scotland, but fallen elsewhere; readings ranging from 39° at Scilly to 30° at Loughborough and Hurst Castle. Sharp frost occurring generally at night. *Wind* North-Easterly in Denmark and the northern parts of Ireland and England, but Northerly or North-Westerly in other parts of our Islands as well as in the west of France; fresh or strong in force generally in morning, but subsequently moderating. *Sea* very high at Aberdeen, rough on our east coasts generally, and rather rough in the west. *Barometer* rising over our Islands and the west of France, but falling elsewhere. Pressure now highest off our western coasts, with depression of previous day over the Netherlands. Depression subsequently moving north-eastwards, but slight fall of barometer taking place in north of Scotland.	
		Thursday, March 4. *Weather* dull at some of our western and south-western stations, but fine elsewhere. Rain falling in south-west later. *Temperature* risen on our north-east coasts and also on the eastern shores of the North Sea, but fallen elsewhere; readings ranging from 40° at Scilly and Aberdeen to 20° at Parsonstown. Frost occurring at night in most places. *Wind* moderate Westerly or North-Westerly on our north and east coasts, but South-Westerly on our north-west coasts, and South-Easterly or Easterly in the south-west. Subsequently increasing to strong breeze in south-west. *Sea* rather rough off the east of England, but moderate to smooth elsewhere. *Barometer* rising over England, France, and the Netherlands, but falling in most other localities. Anticyclone lying over France, with depression of previous two days over the Baltic. New depression approaching our south-west coasts later, occasioning general fall of barometer.	
		Friday, March 5. *Weather* fair over Scandinavia and the northern parts of Ireland and England, but cloudy elsewhere, with rain in the west of France, and snow at some of our extreme northern and south-western stations. Snow or rain falling in south later. *Temperature* risen several degrees in the west of France and south of England, but fallen elsewhere; readings ranging from 42° at Scilly to 26° at Loughborough. Frost occurring at night in many parts of the Kingdom. *Wind* variable or Northerly on our more northern coasts, but fresh Easterly in the south (with a gale at Scilly) and strong Southerly in the west of France. Subsequently increasing to moderate or fresh gale at most of the Channel stations. *Sea* rough on our south-west coasts. *Barometer* falling generally. Pressure highest in the south-east of France, with a well-defined and rather deep depression off the mouth of the English Channel. Depression subsequently moving slowly eastwards, and barometer rising on our western coasts.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

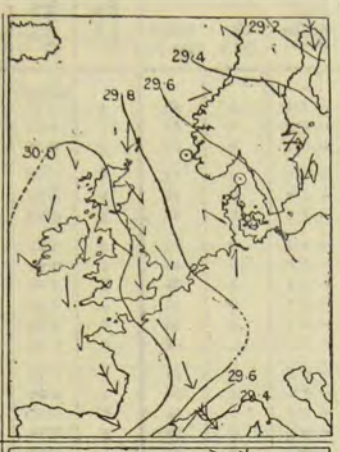
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Saturday, March 6.

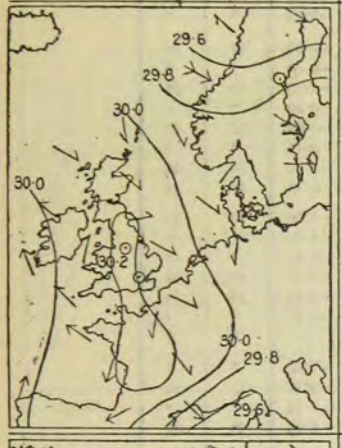
Weather fine in the west of our Islands and also in several parts of Scandinavia, but cloudy or overcast elsewhere, with snow showers at our northern and eastern stations.

Temperature fallen at all but our western stations; readings ranging from 41° at Scilly to 26° at Sumburgh Head and Stornoway. Hard frost occurring over England at night; thermometer in screen falling to 19° at Shields and Cambridge, 16° at York and Loughborough, and 7° at Stoke-on-Trent (Tean Vicarage).

Wind variable on eastern shores of North Sea, but Northerly or North-Westerly elsewhere; moderate to strong in force generally, with gales over Bay of Biscay. Wind moderating later and shifting to South-East in south of Ireland.

Sea rough in the Bay of Biscay and rather rough at the mouth of the Channel, but moderate to smooth elsewhere.

Barometer falling in south-east of France, but rising in nearly all other parts of western Europe. Depression of previous day now found near Lyons, with relatively high pressures to the westward of our Islands. Depression continuing to move south-eastwards later.



Sunday, March 7.

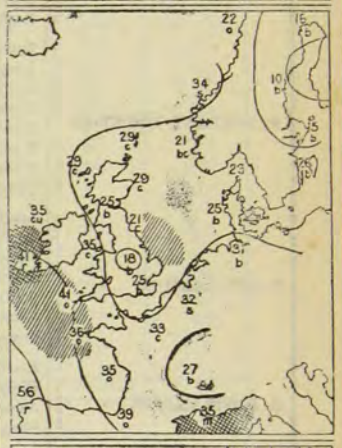
Weather dull in the extreme south-west, with rain at Valencia, but fine elsewhere. Rain or sleet falling later at several of the Irish stations.

Temperature fallen several degrees over England and France, but risen elsewhere; readings over the United Kingdom ranging from 41° at Valencia, Roche's Point, and Scilly to 18° at Loughborough. Sharp frost occurring at night in many parts of Great Britain.

Wind light North-Westerly or Northerly over the North Sea, our east coasts, and the greater part of France, but strong South-Easterly on the west of our Islands, with gales at Belmullet and Valencia. Subsequently shifting to North-East in the east of England.

Sea high at Valencia, and rather rough at Spurn Head, Roche's Point, Scilly, and Yarmouth.

Barometer rising at all but our western stations. Elongated high pressure area lying over the greater part of England and France, with lowest readings in the north of Sweden, but relatively low readings in the extreme west of our Islands. High pressure system subsequently moving eastwards.



Monday, March 8.

Weather dull in the extreme west and the north-west, with rain at Valencia and snow at Stornoway, but generally fine elsewhere.

Temperature risen in most parts of our Islands; readings ranging from 46° at Valencia to 24° at Loughborough. Sharp frost over Great Britain at night.

Wind variable on eastern shores of North Sea, and Northerly in the east of France, but South-Easterly or Southerly in most parts of our Islands; strong in force on our west and south-west coasts.

Sea rough or rather so in the extreme west and south-west, as well as at Spurn Head.

Barometer falling a little on our extreme northern coasts and also in the south of France, but rising elsewhere. Anticyclone lying over Denmark, the Netherlands, the North Sea, and the east of England, with relatively low pressures to the westward of our Islands. No important change later.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 37 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	40	24	35·0	26·4	30·6	− 8·3	0	80	4	0·17	−0·57	*	*
	Stornoway	46	24	38·6	28·6	33·5	− 6·2	0	60	7	0·50	−0·40	16	21
	Wick	40	25	37·3	28·6	32·8	− 6·1	0	64	5	0·50	−0·07	*	*
1. SCOTLAND, E.	Nairn	41	24	36·7	26·9	31·7	− 8·0	0	72	3	0·12	−0·27	*	*
	Aberdeen	42	24	37·0	27·1	31·9	− 7·0	0	71	5	0·20	−0·38	21	28
	Leith	43	22	40·1	26·9	33·3	− 7·1	0	61	3	0·22	−0·12	*	*
2. ENGLAND, N.E.	Alnwick Castle	40	21	35·7	26·9	31·2	− 8·0	0	76	3	0·67	+0·16	*	*
	Durham	41	15	36·4	24·2	30·1	− 9·3	0	83	2	0·68	+0·21	27	36
	Shields	38	19	36·3	27·1	31·6	− 8·4	0	73	3	0·40	+0·03	*	*
	Scarborough ℍ	40	25	37·9	29·6	33·6	− 6·1	0	59	3	0·42	0·00	*	*
	York	42	16	38·4	25·9	32·0	− 8·1	0	70	5	0·21	−0·19	28	37
	Spurn Head	38	26	36·4	28·4	32·3	− 7·6	0	68	4	0·14	?	*	*
3. ENGLAND, E.	Hillington ℍ	39	22	37·0	26·6	31·7	− 8·4	0	72	3	0·13	−0·27	16	21
	Yarmouth	38	25	35·9	28·6	32·1	− 8·8	0	69	4	0·30	−0·15	*	*
	Geldeston	41	22	38·4	28·1	33·1	− 7·9	0	62	5	0·17	−0·20	12	16
	Cambridge	44	19	39·4	25·1	32·0	− 8·8	0	70	2	0·14	−0·20	28	36
	Rothamsted	39	18	36·7	24·8	30·6	−10·4	0	80	2	0·02	−0·43	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	43	11	38·3	21·6	29·7	−11·1	0	86	3	1·03	+0·65	27	35
	Loughborough	43	16	39·3	24·3	31·6	− 9·2	0	73	1	0·02	−0·36	*	*
	Leicester	43	18	39·5	25·5	32·3	− 8·1	0	68	0	—	−0·40	19	25
	Cheadle ℍ	38	18	34·8	23·5	29·0	−10·8	0	91	3	0·06	−0·49	*	*
	Churchstoke ℍ	41	13	36·5	22·1	29·1	−11·6	0	90	0	—	−0·50	31	40
	Hereford ℍ	45	15	39·4	23·5	31·2	−10·1	0	76	1	0·01	−0·44	*	*
	Cirencester	39	15	36·7	24·7	30·5	−10·3	0	81	1	0·01	−0·49	34	44
	Oxford	41	21	38·9	26·1	32·3	− 9·0	0	68	2	0·02	−0·36	33	43
5. ENGLAND, S.	London†	43	21	39·6	26·6	32·9	− 8·9	0	64	2	0·05	−0·30	12	16
	Strathfield Turgiss ℍ	43	18	39·8	25·6	32·5	− 9·3	0	67	1	0·02	−0·35	*	*
	Dungeness	44	22	42·6	26·9	34·5	− 8·4	2	52	0	—	−0·45	*	*
	Hastings (St. Leonard's)	43	25	39·4	28·5	33·8	− 8·6	0	57	4	0·34	−0·11	43	56
	Southampton	45	22	41·0	27·9	34·3	− 8·0	0	54	4	0·31	−0·22	29	38
	Hurst Castle	45	22	39·9	26·7	33·1	− 9·8	0	62	3	0·34	−0·14	*	*
	Stowell ℍ	40	19	37·8	26·7	32·1	− 9·7	0	69	3	0·13	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	43	24	37·8	28·9	33·2	− 6·9	0	62	3	0·23	−1·67	*	*
	Glasgow	40	21	36·4	26 8	31·5	− 8·6	0	74	4	0·18	−0·47	17	22
	Ardrossan	42	24	38·4	27·4	32·7	− 7·4	0	65	3	0·03	−0·64	*	*
	Douglas (Isle of Man)	42	26	38·1	29·1	33·5	− 8·4	0	60	2	0·08	−0·64	28	37
7. ENGLAND, N.W.	Newton Reigny (Penrith)	42	10	35·8	22·4	28·9	−10·4	0	92	2	0·19	−0·42	28	37
	Barrow-in-Furness	41	24	37·4	28·1	32·6	− 9·2	0	66	1	0·04	−0·55	*	*
	Stonyhurst	40	14	36·4	24·3	30·2	− 9·8	0	83	2	0·12	−0·73	29	38
	Blackpool ℍ	39	19	36·8	26·4	31·5	−10·4	0	74	1	0·01	−0·51	30	39
	Manchester	39	17	35·6	24·8	30·0	−10·9	0	84	1	0·06	−0·49	*	*
	Liverpool Obsy (Bidston)	39	21	36·3	27·3	31·7	− 9·9	0	72	2	0·14	−0·27	*	*
	Llandudno ℍ	41	23	38·1	28·0	32·9	−10·0	0	64	2	0·28	−0·20	26	34
	Holyhead	42	28	39·0	30·9	34·8	− 8·5	0	50	2	0·05	−0·46	*	*
8. ENGLAND, S.W.	Llandovery	42	15	38·7	22·3	30·3	−12·4	0	82	2	0·05	−0·90	*	*
	Pembroke	42	29	39·1	32·1	35·5	− 8·7	0	46	2	0·07	−0·58	32	42
	Arlington (N. Devon)	39	20	37·3	26·4	31·7	−10·1	0	72	3	0·10	−0·80	*	*
	Cullompton ℍ	44	19	39·6	27·5	33·4	− 9·0	0	60	3	0·22	−0·46	24	31
	Falmouth	42	31	40·1	33·6	36·8	− 7·6	0	36	3	0·55	−0·28	20	26
	Plymouth	45	24	41·0	28·8	34·7	− 9·4	0	51	3	0·13	−0·52	28	36
	Prawle Point	43	27	39·9	29·9	34·8	− 8·8	0	50	2	0·42	?	*	*
9. IRELAND, N.	Malin Head	45	29	40·0	31·0	35·4	− 5·6	0	46	4	0·07	?	*	*
	Londonderry												*	*
	Mullaghmore	46	31	41·1	32·1	36·5	− 5·2	0	39	2	0·02	−0·73	*	*
	Belmullet	46	28	41·1	31·1	35·9	− 8·2	0	43	5	0·59	?	*	*
	Markree Castle	46	20	40·8	24·4	32·4	− 8·6	0	67	2	0·03	−0·57	18	24
	Brookeborough	44	21	40·5	26·7	33·4	− 6·5	0	60	0	—	?	*	*
	Armagh	44	24	39·7	28·1	33·7	− 8·1	0	58	1	0·03	−0·49	20	26
	Donaghadee	41	29	38·9	30·6	34·6	− 7·4	0	52	2	0·16	−0·34	*	*
	Edgeworthstown	44	21	39·6	25·7	32·4	− 7·9	0	67	1	0·25	−0·46	*	*
10. IRELAND, S.	Dublin	42	23	38·7	28·9	33·7	− 8·7	0	58	1	0·09	−0·51	33	43
	Parsonstown	45	19	40·7	24·4	32·3	− 9·6	0	68	0	—	−0·54	35	45
	Kilkenny	42	16	?38·5	26·6	?32·1	−?9·7	0	?69	0	—	−0·58	*	*
	Waterford	46	27	39·7	29·2	34·3	− 9·6	0	54	0	—	−0·71	*	*
	Roche's Point	47	28	42·7	32·7	37·6	− 6·8	2	32	3	0·74	−0·15	*	*
	Valencia	47	30	44·0	34·4	39·1	− 6·2	6	27	4	0·71	−0·33	31	40
	Killarney	46	20	41·6	29·5	35·4	− 8·4	0	46	3	0·16	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	43	37	41·7	36·7	39·1	− 7·0	0	20	4	0·64	+0·06	*	*
	Jersey (Noirmont)	42	31	40·3	34·0	37·1	− 5·8	0	34	5	1·23	+0·66	28	33

Stations marked ℍ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 11.] *New Series.* WEEK ENDING MONDAY, 15TH MARCH, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 44.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	45	22	41·9	30·4	36·0	3 below.	0	42	9	− 75	518	+176
	1. SCOTLAND, EAST	44	16	39·3	25·9	32·4	8 below.	0	67	21	−100	603	+212
	2. ENGLAND, N.E.	42	18	37·2	28·4	32·6	7 below.	0	66	15	−112	599	+248
	3. ENGLAND, EAST	45	21	37·0	27·6	32·1	9 below.	0	69	12	−149	666*	+299
	4. MIDLAND COUNTIES	44	15	37·4	25·7	31·4	10 below.	0	74	19	−157	632	+273
	5. ENGLAND, SOUTH	45	24	38·3	28·0	33·0	10 below.	0	63	38	−148	527	+246
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	43	20	39·4	28·6	33·8	7 below.	0	57	30	−102	494	+208
	7. ENGLAND, N.W.	42	15	37·8	26·3	31·9	10 below.	0	71	24	−111	536	+256
	8. ENGLAND, S.W.	44	16	38·9	28·0	33·3	10 below.	0	61	47	−187	451	+282
	9. IRELAND, NORTH	45	16	40·5	29·1	34·7	7 below.	0	51	46	−133	418*	+168
	10. IRELAND, SOUTH	45	20	41·7	31·1	36·3	7 below.	0	41	81	−178	354	+186
	— CHANNEL ISLANDS	43	29	39·9	32·7	36·2	9 below.	0	41	103	−170	194	+115

	DISTRICTS. (See p. 44.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	1	6 less.	59	+ 5	8·6	− 0·1	46	58	179	+49	27	+ 8
	1. SCOTLAND, EAST	2	2	2 less.	46	+ 7	4·8	− 0·4	25	32	167	−20	25	− 2
	2. ENGLAND, N.E.	4	3	1 less.	47	+ 8	5·5	+ 0·5	20	25	140	0	20	0
	3. ENGLAND, EAST	2	1	3 less.	44	+ 4	4·2	− 1·7	32	40	175	− 3	25	0
	4. MIDLAND COUNTIES	1	less than ½	4 less.	39	+ 1	5·1	− 0·9	23	29	154	− 6	22	0
	5. ENGLAND, SOUTH	0	-	4 less.	38	0	5·2	− 1·1	27	34	137	− 7	22	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	0	-	6 less.	45	− 3	8·4	− 1·6	29	37	132	− 4	19	0
	7. ENGLAND, N.W.	1	less than ½	5 less.	43	0	7·1	− 0·5	29	37	147 *	+ 6	21	+ 1
	8. ENGLAND, S.W.	0	-	7 less.	45	+ 1	7·6	− 2·8	28	35	164	−19	23	− 2
	9. IRELAND, NORTH	0	-	5 less.	45	− 6	7·8	− 0·1	22	27	127	−30	18	− 4
	10. IRELAND, SOUTH	1	4	3 less.	42	− 6	8·2	− 2·5	27	34	170	−14	24	− 1
	— CHANNEL ISLANDS	0	-	5 less.	55	+ 7	6·8	− 1·2	56	69	229	−13	31	− 1

General Remarks.

Weather has been generally fine and cold, and the atmosphere very dry.

Temperature has continued extremely low, the deficit ranging from 10° in the "Midland Counties," "England, S.", "England, S.W.", and "England, N.W.", to between 7° and 9° in all other parts of the Kingdom except the north of Scotland. In "England, N.W." the mean for the week has been only 32°, and that in the "Midland Counties" 31°·4. The highest of the maxima, which at most stations were registered on the 9th, varied from 42° to 45°, but during the greater part of the period the daily maxima were only a few degrees above freezing point. The minima, which were recorded on different days in the various districts ranged from between 18° and 20° in most parts of England and Ireland, and in the east of Scotland, to 29° in the "Channel Islands". At Worksop the minimum in the screen on the 10th was as low as 10° and the reading by a thermometer exposed on the snow − 1°.

Rainfall has been less than the mean in all districts. Over the greater part of the country the fall has been scarcely appreciable.

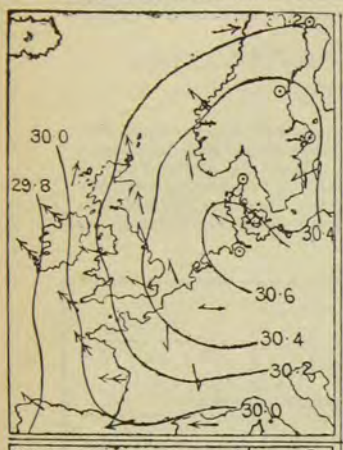
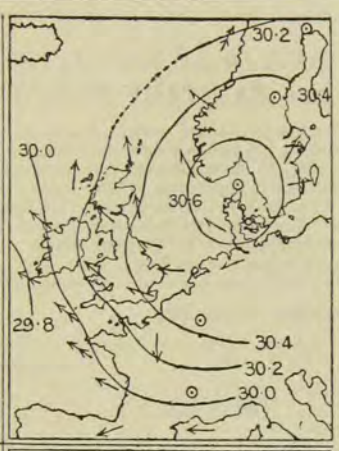
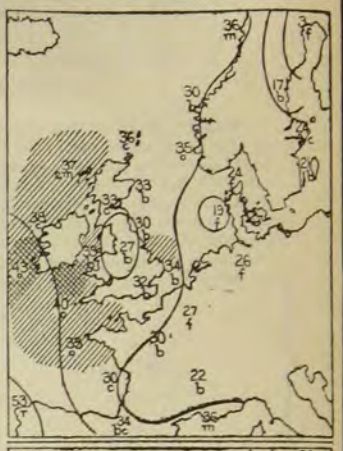
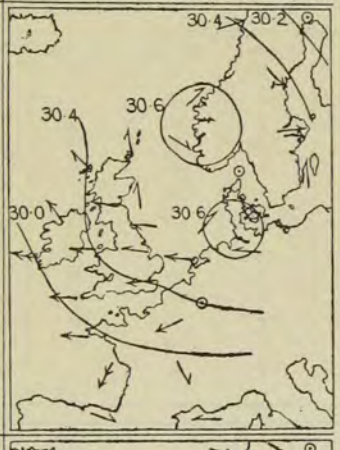
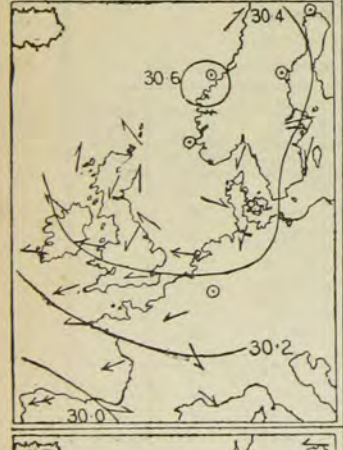
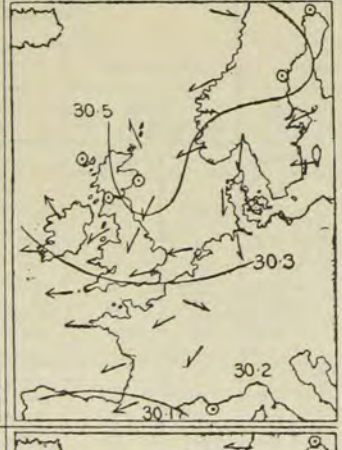
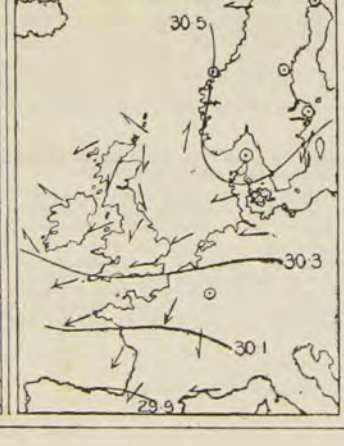
Bright sunshine has been more prevalent than for many weeks past, the percentages of the possible duration ranging from 25 in "England, N.E." and 27 in "Ireland, N." to 58 in "Scotland, N." and 69 in the "Channel Islands".

Depressions observed.—During the whole of this period the distribution of pressure has been anticyclonic, and, with the exception of a depression which appeared off our south-west coasts at the end of the time, no such system has been shown in our neighbourhood. Strong South-Easterly or Southerly winds and gales were experienced on all our more western coasts on the 9th and 10th, but during the remainder of the period light or moderate breezes from between South-East and North-East were chiefly prevalent over our Islands.

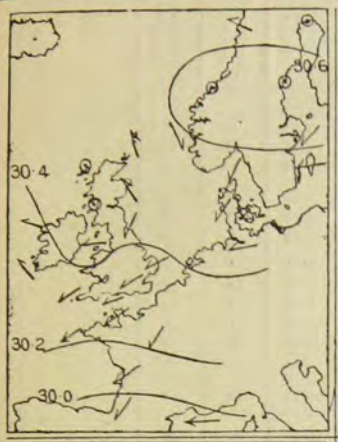
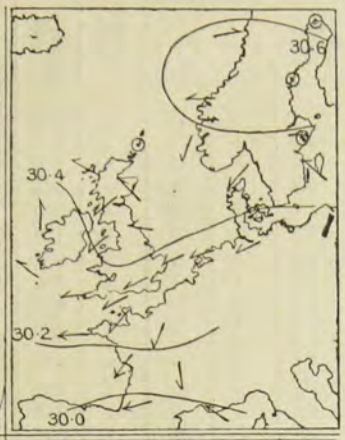
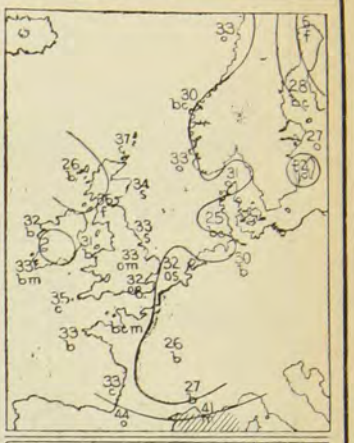
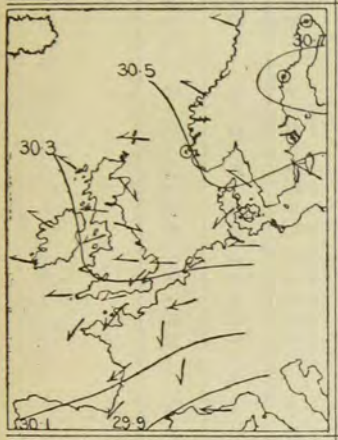
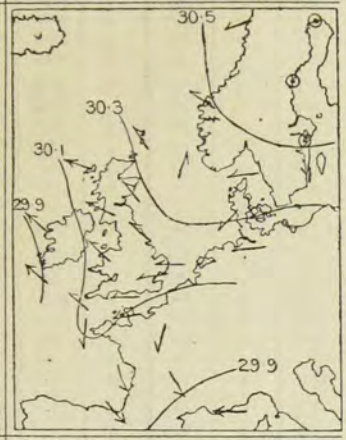
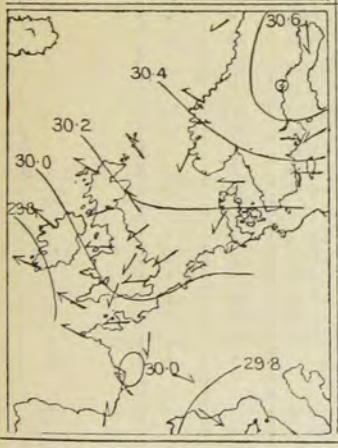
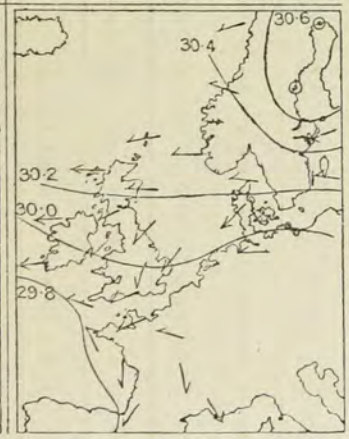
* These values have been altered slightly owing to the receipt of further information.

E 21430. 350.—3/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, March 9.** *Weather* foggy in Denmark and dull in the south-west of our Islands, but fine elsewhere. Rain subsequently falling at Valencia. *Temperature* risen a little over Denmark, the south of Norway, and the east of England, but fallen in most other localities; readings ranging from 48° at Valencia to 26° at Loughborough. Sharp frost occurring over Great Britain at night; thermometer on the grass at Oxford falling to 15°. *Wind* calm or light and variable on the eastern shores of the North Sea, but South-Easterly or Southerly in our Islands, with a gale on our west and south-west coasts. Subsequently increasing to slight gale from South at some of the Scotch stations. *Sea* high at Valencia and Pembroke, and rough on our south-western, western, and extreme northern coasts generally. *Barometer* falling decidedly on our west and south-west coasts, but rising elsewhere. Anticyclone lying over Germany and the south of Denmark, and area of low pressure to the westward of our Islands; gradients steep over our western coast. Rise taking place in west and south-west later.	
		**Wednesday, March 10.** *Weather* cloudy over the central parts of Ireland and England, but generally fine elsewhere. *Temperature* fallen slightly in the west and south; readings ranging from 42° at Valencia and Roche's Point to 30° at Nairn. Sharp frost again occurring at night in most places; thermometer on the grass in London falling to 22°. *Wind* Easterly at our southern and the French stations, but South-Easterly or Southerly elsewhere; strong in force on our western and southern coasts, with a gale at Belmullet and Scilly. Subsequently increasing to gale at Valencia. *Sea* high at Valencia and rough on our extreme south-west, west, and north coasts generally as well as at Yarmouth. *Barometer* falling a little in the east of France, but rising elsewhere. Anticyclone lying over the eastern shores of the North Sea, with relatively low pressures to the westward of our Islands and the southward of France. No important change later.	
		**Thursday, March 11.** *Weather* dull in Denmark and some parts of Scandinavia, but generally fine elsewhere. *Temperature* fallen a few degrees in our Islands and France; readings ranging from 39° at Valencia to 26° at Loughborough and 25° at Nairn. Sharp frost occurring generally at night, the lowest readings being 16° at Nairn and 19° at Aberdeen. *Wind* light Northerly in Denmark and the east of France, and strong Easterly at our southern and the western French stations, but South-Easterly or Southerly on our north and north-west coasts. *Sea* rather rough off the east and south-west of England, but moderate to smooth elsewhere. *Barometer* rising at all but the Danish and southern Scandinavian stations. Large anticyclone lying over Norway, the North Sea, and our own northern and eastern coasts, with lowest pressures in Spain. Slight fall taking place generally later.	
		**Friday, March 12.** *Weather* dull in Denmark as well as over eastern and central England, but fine in all other parts of Western Europe. *Temperature* risen slightly over France and Central England and briskly in the south of Norway, but fallen in Sweden and Scotland; readings over our Islands varying from 38° at Valencia, Roche's Point, and Scilly to 21° at Aberdeen. Frost occurring generally at night, lowest reading being 20° at Parsonstown. *Wind* light and variable on our extreme northern coasts, but chiefly Easterly elsewhere; fresh or strong in force over the Channel and Bay of Biscay. *Sea* rough at the mouth of the Channel, but moderate to smooth elsewhere. *Barometer* falling at all but the Scandinavian stations. Anticyclone lying over the northern parts of Norway and Sweden, with relatively low pressures over Spain. Slight rise taking place in south-west later.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather during the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, March 13.** *Weather* fine in most places, but snow showers falling over the eastern parts of Great Britain. *Temperature* risen a little in France and the north of our Islands, but changed irregularly elsewhere. Readings varying between 35° and 28° over England ; between 37° and 26° in Scotland ; and between 37° and 23° in Ireland. Frost occurring generally at night. *Wind* South-Easterly on our western and northern coasts, but Easterly or North-Easterly elsewhere ; light or moderate in force generally, but strong in the Bay of Biscay. *Sea* moderate to smooth. *Barometer* rising generally. Large anticyclone lying over Scandinavia, with relatively low pressures over Spain and the south of France. Fall taking place in Ireland later.	
		**Sunday, March 14.** *Weather* fair on the whole, but snow falling over the northern and eastern parts of Great Britain. Rain setting-in at Valencia in evening. *Temperature* fallen a little over Sweden and England, but risen elsewhere ; readings ranging from 40° at Valencia and Roche's Point to 28° at Loughborough and 25° at Parsonstown. Frost occurring generally at night. *Wind* South-Easterly on our western and northern coasts, but Easterly or North-Easterly elsewhere ; light or moderate in force generally. South-Easterly wind subsequently increasing to strong breeze in west of Ireland. *Sea* moderate to smooth. *Barometer* falling at all but the Scandinavian and Danish stations. Central portion of anticyclone now lying over Gulf of Bothnia, and relatively low pressures shown over the Gulf of Genoa and the extreme west of our Islands. Fall subsequently becoming brisk in west.	
		**Monday, March 15.** *Weather* fine in Sweden and fair at many of our eastern stations, but cloudy or overcast in the west with sleet or rain in Ireland, and snow showers at Aberdeen. Snow and hail showers falling in east of England later. *Temperature* risen slightly in our Islands and France, but fallen on the eastern shores of the North Sea ; readings ranging from 42° at Valencia to 31° at Hurst Castle. Sharp frost occurring generally at night, the lowest readings being 24° at Dungeness and 26° at Parsonstown and in London. *Wind* North-Easterly in east and south, but South-Easterly in west and north ; strong in force on our south-west coasts. Subsequently backing to East in Scotland. *Sea* rough in the south-west ; moderate to smooth elsewhere. *Barometer* falling generally. Anticyclone still lying over Gulf of Bothnia, with an area of relatively low pressure over the Gulf of Genoa, and another off the south-west of Ireland. Rise taking place on our western and northern coasts later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇉ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 41 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	43	27	41·3	30·4	35·7	− 3·2	0	44	2	0·05	−0·63	*	*
	Stornoway	45	22	43·6	29·7	36·4	− 3·6	4	42	1	0·06	−0·82	46	58
	Wick	45	24	40·7	31·1	35·8	− 3·2	0	43	2	0·13	−0·32	*	*
1. SCOTLAND, E.	Nairn	44	16	40·4	24·1	32·0	− 7·9	0	70	1	0·07	−0·32	*	*
	Aberdeen	40	19	38·4	27·1	32·6	− 6·5	0	66	4	0·39	−0·12	25	32
	Leith	42	24	39·0	26·6	32·6	− 8·2	0	66	2	0·03	−0·28	*	*
2. ENGLAND, N.E.	Alnwick Castle	38	20	36·7	28·0	32·2	− 7·4	0	69	4	0·70	+0·21	*	*
	Durham	41	13	36·9	24·6	30·6	− 9·0	0	80	4	0·39	−0·08	19	24
	Shields	39	26	37·4	29·7	33·4	− 6·6	0	60	4	0·26	−0·09	*	*
	Scarborough ℳ	38	27	36·7	30·8	33·7	− 6·2	0	58	4	0·18	−0·23	*	*
	York	42	24	38·4	27·6	32·8	− 7·5	0	64	4	0·10	−0·28	21	26
	Spurn Head	38	24	36·9	29·6	33·1	− 7·1	0	62	4	0·13	?	*	*
3. ENGLAND, E.	Hillington ℳ	41	26	37·8	27·9	32·7	− 7·5	0	65	3	0·20	−0·15	32	40
	Yarmouth	37	29	34·9	29·9	32·3	− 8·7	0	68	1	0·03	−0·37	*	*
	Geldeston	38	28	36·2	28·9	32·4	− 8·6	0	67	1	0·04	−0·31	36	45
	Cambridge	45	21	39·6	25·7	32·4	− 8·6	0	67	2	0·07	−0·23	29	36
	Rothamsted	42	24	36·6	26·4	31·4	− 9·6	0	74	1	0·01	−0·37	*	*
	Ingatestone	40	25	36·7	26·8	31·6	−10·0	0	73	1	0·01	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	41	15	38·0	26·3	32·0	− 9·1	0	70	2	0·06	−0·29	25	31
	Loughborough	44	23	38·7	26·1	32·2	− 8·6	0	69	2	0·10	−0·22	*	*
	Leicester	43	24	39·0	26·8	32·7	− 7·9	0	65	0	—	−0·34	22	28
	Cheadle ℳ	38	22	35·4	24·7	29·9	− 9·9	0	85	2	0·04	−0·47	*	*
	Churchstoke ℳ	41	18	35·6	23·2	29·2	−11·5	0	90	0	—	−0·44	21	26
	Hereford ℳ	43	24	37·7	26·1	31·7	− 9·8	0	72	0	—	−0·38	*	*
	Cirencester	41	23	36·7	25·4	30·9	−10·2	0	78	0	—	−0·46	23	29
	Oxford	43	23	38·4	27·0	32·5	− 9·3	0	67	1	0·02	−0·33	26	33
5. ENGLAND, S.	London†	43	26	37·6	28·9	33·1	− 9·2	0	62	1	0·01	−0·31	14	18
	Strathfield Turgiss ℳ	42	24	38·1	25·9	31·8	−10·5	0	71	0	—	−0·32	*	*
	Dungeness	41	29	38·6	30·1	34·2	− 8·7	0	55	1	0·08	−0·33	*	*
	Hastings (St. Leonard's)	40	27	36·3	28·3	32·2	−10·4	0	69	0	—	−0·41	33	41
	Southampton	44	25	40·3	27·9	33·9	− 8·9	0	57	0	—	−0·45	34	43
	Hurst Castle	45	28	39·3	29·3	34·2	− 9·0	0	55	0	—	−0·41	*	*
	Stowell ℳ	41	24	38·0	25·5	31·6	−10·3	0	73	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	43	20	41·1	28·5	34·6	− 5·7	0	52	0	—	−1·17	*	*
	Glasgow	39	23	37·0	27·7	32·2	− 8·2	0	69	0	—	−0·58	24	30
	Ardrossan	42	23	40·9	27·4	34·0	− 6·7	0	56	1	0·03	−0·54	*	*
	Douglas (Isle of Man)	41	27	38·7	30·6	34·5	− 7·6	0	53	0	—	−0·65	34	43
7. ENGLAND, N.W.	Newton Reigny (Penrith)	41	15	37·5	22·8	29·9	− 9·9	0	85	3	0·04	−0·48	31	39
	Barrow-in-Furness	41	25	39·1	28·0	33·4	− 8·7	0	60	1	0·06	−0·49	*	*
	Stonyhurst	38	23	36·7	26·1	31·2	− 9·4	0	76	1	0·01	−0·78	27‖	34‖
	Blackpool ℳ	39	21	38·0	24·5	31·0	−11·3	0	77	0	—	−0·48	26	33
	Manchester	39	26	36·5	27·3	31·8	− 9·4	0	71	0	—	−0·45	*	*
	Liverpool Obsy (Bidston)	40	26	37·0	27·1	31·9	−10·0	0	71	1	0·01	−0·38	*	*
	Llandudno ℳ	42	23	38·3	26·0	32·0	−11·2	0	70	1	0·04	−0·41	33	41
	Holyhead	42	28	38·9	28·9	33·8	− 9·8	0	57	0	—	−0·50	*	*
8. ENGLAND, S.W.	Llandovery	43	16	39·0	22·7	30·6	−12·2	0	80	0	—	−0·79	*	*
	Pembroke	41	28	38·6	29·9	34·1	−10·4	0	55	0	—	−0·55	28	35
	Arlington (N. Devon)	40	22	37·9	25·0	31·3	−11·4	0	75	0	—	−0·77	*	*
	Cullompton ℳ	42	24	39·8	26·5	33·0	− 9·8	0	63	0	—	−0·55	34	43
	Falmouth	43	28	39·5	32·5	35·9	− 8·9	0	43	0	—	−0·77	16	20
	Plymouth	42	26	39·6	29·6	34·5	− 9·9	0	53	0	—	−0·56	32	40
	Prawle Point	40	28	38·1	30·0	33·9	− 9·9	0	57	0	—	?	*	*
9. IRELAND, N.	Malin Head	42	26	40·1	28·7	34·2	− 7·1	0	55	0	—	?	*	*
	Londonderry	45	23	42·4	28·8	35·4	− 5·6	1	45	0	—	−0·63	*	*
	Mullaghmore	42	30	40·4	32·0	36·2	− 5·8	0	41	0	—	−0·69	*	*
	Belmullet	44	28	41·3	32·1	36·6	− 8·2	0	38	2	0·17	?	*	*
	Markree Castle	41	16	40·3	25·1	32·5	− 9·2	0	67	0	—	−0·55	27	34
	Brookeborough	44	21	41·1	27·6	34·2	− 6·0	0	55	0	—	?	*	*
	Armagh	43	22	40·0	28·4	34·0	− 7·8	0	56	0	—	−0·48	16	20
	Donaghadee	42	27	39·1	31·9	35·4	− 7·3	0	46	0	—	−0·45	*	*
	Edgeworthstown	42	21	40·1	27·0	33·4	− 7·0	0	60	0	—	−0·56	*	*
10. IRELAND, S.	Dublin	42	28	39·2	32·1	35·6	− 7·2	0	45	3	0·14	−0·32	23	29
	Parsonstown	44	20	42·1	26·7	34·3	− 7·9	0	53	1	0·11	−0·42	32	40
	Kilkenny	44	21	40·7	28·5	34·4	− 7·4	0	53	0	—	−0·51	*	*
	Waterford	43	23	?40·3	30·4	?35·3	−?8·6	0	?47	?	?	?	*	*
	Roche's Point	45	28	43·1	35·3	39·1	− 5·3	3	24	2	0·75	−0·09	*	*
	Valencia	45	27	44·0	35·1	39·4	− 6·0	6	25	2	0·89	−0·08	26	33
	Killarney	45	21	42·2	29·6	35·7	− 8·4	1	42	2	0·49	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	43	33	41·0	35·0	37·9	− 8·5	0	29	0	—	−0·54	*	*
	Jersey (Noirmont)	42	29	38·7	30·4	34·4	− 8·9	0	53	0	—	−0·52	56	69

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

‖ The corresponding values for last week should have read "33" and "43."

Note.—It will be observed that *Ingatestone* has been added to the list of stations in "England, E." The Return from Waterford is incomplete.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 12.] *New Series.* WEEK ENDING MONDAY, 22ND MARCH, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

DISTRICTS (See p. 48.)	Temperature of the Air.											
	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
			Averages of				For the Week.		Since December 29, 1885.			
	Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.												
0. SCOTLAND, NORTH	55	30	44·5	35·6	39·9	0 (average).	7	23	16	− 73	541	+162
1. SCOTLAND, EAST	60	24	46·8	34·1	40·2	0 (average).	13	29	34	− 97	632	+205
2. ENGLAND, N.E.	61	27	45·9	36·2	40·9	1 below.	11	22	26	−112	621	+237
3. ENGLAND, EAST	61	19	49·5	35·7	42·4	1 above.	29	18	41	−138	684	+284
4. MIDLAND COUNTIES	64	20	49·5	35·4	42·2	1 above.	29	18	48	−145	650	+258
5. ENGLAND, SOUTH	62	18	48·5	35·0	41·6	2 below.	18	28	56	−153	555	+250
Principal Grazing, &c. Districts.												
6. SCOTLAND, WEST	55	30	44·4	38·0	41·1	0 (average).	7	15	37	−110	509	+197
7. ENGLAND, N.W.	60	27	46·6	36·8	41·6	1 below.	13	21	37	−112	557	+251
8. ENGLAND, S.W.	61	17	48·3	37·9	42·9	1 below.	24	11	71	−185	462	+277
9. IRELAND, NORTH	60	26	48·6	38·4	43·3	0 (average)	24	10	70	−127	428	+154
10. IRELAND, SOUTH	62	22	50·7	39·1	44·8	1 above.	32	8	113	−172	362	+177
— CHANNEL ISLANDS	57	32	50·0	40·7	45·3	0 (average)	29	4	132	−164	198	+114

DISTRICTS. (See p. 48.)	Rainfall.							Bright Sunshine.					
	For the Week.			Since December 29, 1885.				For the Week.		Since December 29, 1885.			
	Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.													
0. SCOTLAND, NORTH	6	7	0 (average)	65	+ 6	9·3	0·0	5	6	184	+26	25	+ 4
1. SCOTLAND, EAST	5	7	3 more.	51	+ 8	5·5	− 0·1	11	13	178	−46	24	− 5
2. ENGLAND, N.E.	5	6	2 more.	52	+10	6·1	+ 0·6	9	11	149	−18	19	− 2
3. ENGLAND, EAST	5	4	0 (average)	49	+ 6	4·6	− 1·7	9	10	184	−27	23	− 3
4. MIDLAND COUNTIES	5	5	1 more.	44	+ 3	5·6	− 0·8	9	11	163	−30	20	− 4
5. ENGLAND, SOUTH	5	5	2 more.	43	+ 2	5·7	− 1·0	11	13	168	−31	21	− 3
Principal Grazing, &c. Districts.													
6. SCOTLAND, WEST	6	13	7 more.	51	− 1	9·7	− 0·9	2	3	134	−30	18	− 3
7. ENGLAND, N.W.	6	9	4 more.	49	+ 3	8·0	0·0	4	4	151	−14	19	− 2
8. ENGLAND, S.W.	6	15	9 more.	51	+ 4	9·1	− 1·9	8	9	172	−52	21	− 6
9. IRELAND, NORTH	6	8	2 more.	51	− 4	8·6	+ 0·1	3	3	130	−56	17	− 7
10. IRELAND, SOUTH	6	11	5 more.	48	− 4	9·2*	− 2·1	14	17	184	−31	23	− 4
— CHANNEL ISLANDS	6	13	7 more.	61	+ 9	8·1	− 0·4	5	6	234	−48	28	− 6

General Remarks.

Weather continued cold and winterlike during the first few days of the period, but afterwards became very warm, with rather heavy falls of rain. Over the Channel and our southern coasts dense wet fogs were experienced towards the close of the week.

Temperature was again very low until the morning of the 18th, minima between 17° and 20° being recorded over the greater part of England, and between 22° and 30° in Ireland and Scotland. After this date, however, the thermometer rose rapidly, and during the remainder of the week readings in most parts of the Kingdom were several degrees above the average. The maxima were registered generally either on the 19th or 21st, when they ranged from 60° to 64° over England, from 55° to 60° in Scotland, and from 60° to 62° in Ireland. The average for the week has consequently not differed much from the mean value, for the 20 years 1861-80, being 1° above in "England, E.", the "Midland Counties", and "Ireland, S.", and about equal to it or 1° below in nearly all other districts.

Rainfall has been more than the mean in all districts except "Scotland, N." and "England, E."

Bright sunshine has been very deficient, the percentages of the possible amount of duration ranging from 3 in "Scotland, W.", and "Ireland, N.", and 4 in "England, N.W.", to 17 in "Ireland, S."

Depressions observed.—During the earlier part of this period pressure continued highest over Scandinavia and lowest to the south-westward of our Islands, with fresh or strong Easterly winds on our coasts. As the week progressed, however, depressions began to skirt our western coasts in a northerly direction and the high pressure area was gradually transferred from Scandinavia to France. The wind in our Islands consequently became South-Easterly or Southerly, and finally South-Westerly. On the 18th and 19th the Southerly current was strong at all our more western and northern stations, and in some places attained the force of a gale.

* This value has been altered slightly owing to the receipt of some arrears of observations.

E 21577. 350.—3/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

Weather

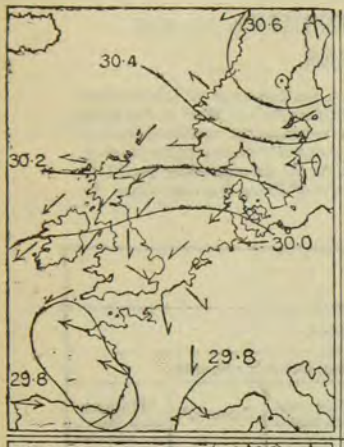
During the 24 hours succeeding

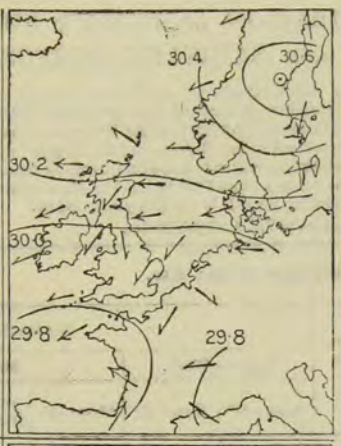
8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, March 16.

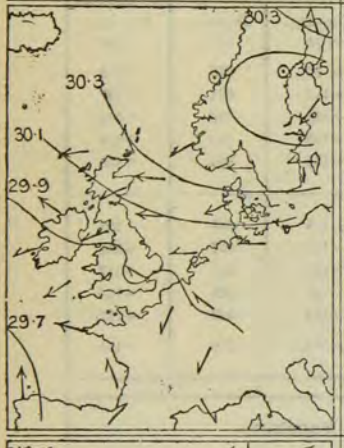
Weather very cloudy at all but our western stations, with snow in the eastern parts of Great Britain and also in the Netherlands. Snow or sleet falling later in the west and north generally.

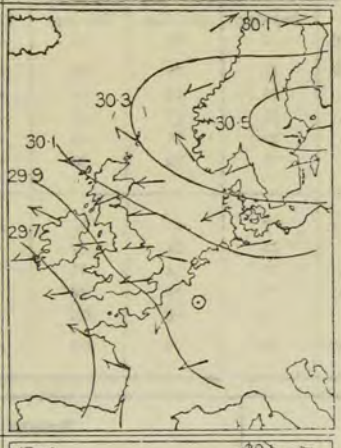
Temperature fallen a little in most parts of the United Kingdom; readings ranging from 87° at Scilly to 27° at Nairn and Dungeness. Sharp frost occuring over England at night, the lowest minima in the screen being 20° at Oxford, 21° in London, and 22° at Dungeness. Thermometer on grass in London falling to 11°.

Wind light from North or North-West over our south-eastern counties and the east of France, but Easterly or North-Easterly elsewhere, and strong in force over Denmark and the south of Norway.

Sea rough on our north-east coasts, and rather rough at the mouth of the Channel.

Barometer rising at our western and northern stations, but falling elsewhere. Anticyclone lying over the Gulf of Bothnia, with shallow areas of low pressure over the Netherlands, the Bay of Biscay, and the Gulf of Genoa. Fall subsequently taking place in west and north, and mercury rising on eastern shores of North Sea.





Wednesday, March 17.

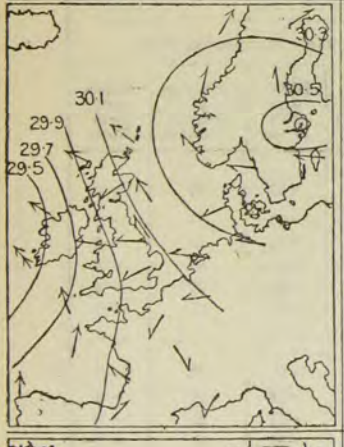
Weather fair in Scandinavia, the south of our Islands, and east of France, but dull elsewhere, with snow or hail over the east of Scotland and north of England.

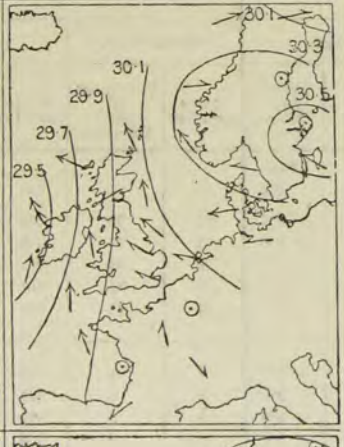
Temperature changed irregularly; readings ranging from 40° at Scilly and 39° at Sumburgh Head to 21° at Oxford. Maxima over England higher than of late, but frost again occurring at night.

Wind Northerly in the east of France and Southerly in the south-west of that country, but Easterly elsewhere; strong to a gale in force on the east coast of Scotland.

Sea high at Wick and Aberdeen, and rather rough off the the north-east of England as well as at Malin Head.

Barometer rising at all the more eastern stations, but falling elsewhere — quickly in the north of Scandinavia. Anticyclone lying over Sweden, with relatively low pressures over the Bay of Biscay and Gulf of Genoa. No important change later.





Thursday, March 18.

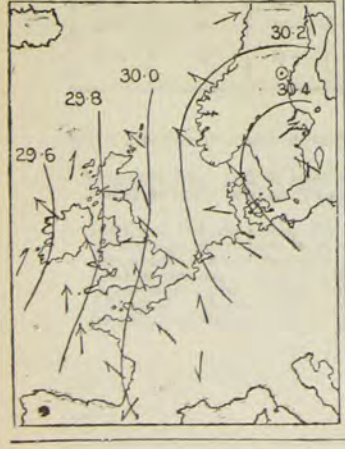
Weather fair at most of the Continental Stations, but cloudy or overcast over the United Kingdom, with snow showers at some of the northern stations, and rain in the south-west. Rain falling later on all our western coasts.

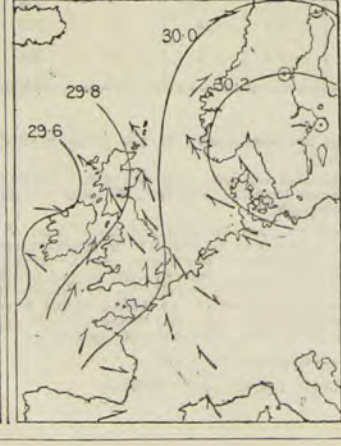
Temperature risen generally, several degrees in the south-west and south; readings ranging from 50° at Valencia and Scilly to 33° in the Shetlands. Further rise occurring over England later.

Wind Easterly or North-Easterly on the eastern shores of the North Sea, but South-Easterly or Southerly elsewhere; strong to a gale in Scotland and the north of Ireland, but moderate to fresh on our eastern and southern coasts.

Sea very high at Wick, high at Aberdeen, and rough or rather so on all the more exposed parts of our coasts.

Barometer falling in Scandinavia and the west and north of our Islands, but rising elsewhere. Anticyclone now lying over the southern parts of Sweden, with rather deep depression off the west of Ireland. Depression subsequently moving northwards, and barometer rising in south-west.





Friday, March 19.

Weather fine at several of the French stations, but cloudy or overcast elsewhere, with rain in the west of our Islands, and also at Cambridge. Rain falling later in nearly all parts of the Kingdom.

Temperature fallen a little in Denmark and the Netherlands, but risen elsewhere, several degrees in Ireland and England; readings over the United Kingdom ranging from 51° at Valencia to 37° at Yarmouth. Thermometer subsequently rising to 59° at Cambridge and 62° in London.

Wind South-Easterly or Southerly, light or moderate in force generally, but strong at Scilly and also in the north of Scotland. Subsequently veering to West in the west of France.

Sea very high at Wick, rough at Sumburgh Head and Scilly, and rather rough on our north-east coasts.

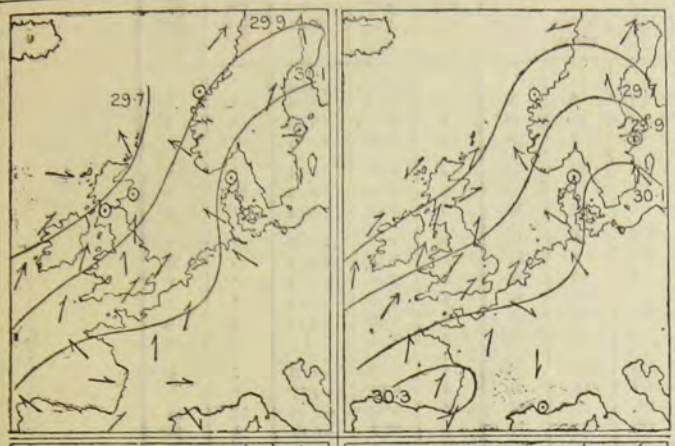
Barometer rising at our western, southern, and the French stations, but falling elsewhere. Anticyclone now lying over the Baltic, with low pressures to the westward of our Islands.

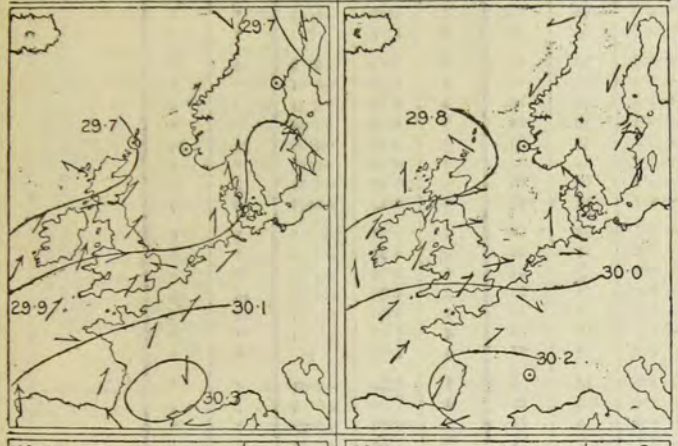
SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

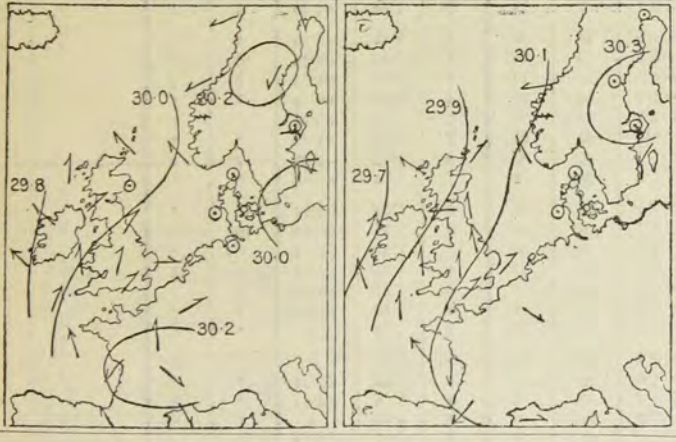
Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**







Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Saturday, March 20.

Weather foggy on the western and south-western coasts of Great Britain and cloudy in most other places. Rain falling later in nearly all parts of the Kingdom.

Temperature risen a little generally; readings over our Islands ranging from 52° at Parsonstown and 51° at Valencia and in London, to 41° at Sumburgh Head, Nairn, Aberdeen, and Leith. Highest maxima 60° at York and Loughborough, 59° at Cambridge, and 58° at Oxford.

Wind South-Easterly on the eastern shores of the North Sea and also in the north of Scotland, but Southerly or South-Westerly elsewhere; light or moderate in force generally.

Sea rough at Sumburgh Head and rather rough off our south-west coasts, but moderate to smooth elsewhere.

Barometer falling at all but our western and southern and the French stations. Areas of high pressure lying over the Baltic and south of France, with relatively low readings on our north-west coasts.

Sunday, March 21.

Weather cloudy or overcast generally, with rain at many of our stations and thick fog over the English and Bristol Channels. Fog continuing in the south all day, but weather improving elsewhere.

Temperature risen at several of the English stations, but changed irregularly elsewhere; readings ranging from 53° at Cambridge to 39° at Aberdeen. Highest maxima 64° at Loughborough, 61° at Cambridge, and 60° at Oxford.

Wind South-Easterly on our extreme northern coasts and southerly on the eastern shores of the North Sea, but chiefly South-Westerly elsewhere; light or moderate in force generally.

Sea rather rough on our extreme south-west coasts.

Barometer falling at the Scandinavian and Danish as well as at several of the English stations, but rising elsewhere. Pressure now highest in the south of France, with relatively low readings over our extreme north-western and northern coasts. Rise taking place over England later.

Monday, March 22.

Weather fine on the east coasts of Great Britain, but cloudy elsewhere with thick fog over the Channel, and rain at all our south-western stations. Rain falling later in nearly all parts of the Kingdom.

Temperature fallen several degrees over Ireland and England; readings ranging from 50° at Valencia and Scilly to 41° at Loughborough. Highest maxima 61° at York, 60° at Aberdeen, and 59° at Nairn and Shields.

Wind light from South-West or West on our east and south-east coasts, but moderate or fresh from South-East or South in the west. Subsequently backing to the Southward in the east.

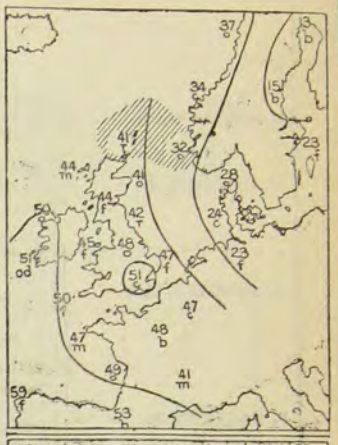
Sea rather rough at Valencia and Scilly, but slight or smooth elsewhere.

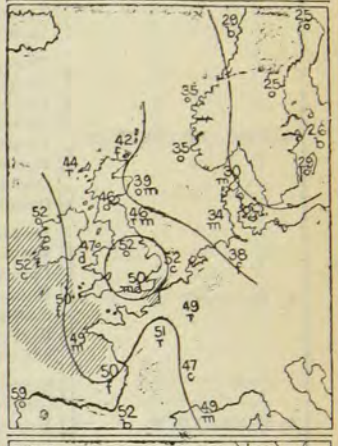
Barometer rising at all but our south-western stations. Areas of high pressure lying over Sweden and France, with relatively low readings on our extreme west and south-west coasts. Slight fall taking place later on all our western coasts.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 45 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	47	30	42·6	34·4	38·4	− 0·7	2	26	6	0·62	−0·03	*	*
	Stornoway	49	32	45·9	36·9	41·3	+ 0·9	11	20	6	0·72	−0·15	5	6
	Wick	55	32	44·9	35·4	40·0	+ 0·8	8	24	6	0·68	+0·25	*	*
1. SCOTLAND, E.	Nairn	59	24	47·9	32·7	40·1	− 0·2	17	35	4	0·26	−0·13	*	*
	Aberdeen	60	32	47·0	34·4	40·5	+ 1·3	14	29	7	1·26	+0·75	11	13
	Leith	58	31	45·4	35·1	40·1	− 1·2	10	25	5	0·52	+0·20	*	*
2. ENGLAND, N.E.	Alnwick Castle	56	31	44·3	38·3	41·2	+ 1·2	6	14	5	1·07	+0·58	*	*
	Durham	59	29	45·1	35·4	40·1	+ 0·3	9	24	5	0·70	+0·22	10	12
	Shields	59	30	45·7	35·9	40·7	+ 0·1	10	23	5	0·49	+0·14	*	*
	Scarborough ℳ	61	30	46·3	37·3	41·7	+ 1·2	12	19	5	0·44	+0·44	*	*
	York	61	27	49·4	35·1	42·0	+ 0·9	21	19	5	0·45	+0·08	8	10
	Spurn Head	54	31	44·7	35·3	39·9	− 0·9	8	25	5	0·32	?	*	*
3. ENGLAND, E.	Hillington ℳ	60	27	49·8	33·6	44·0	+ 3·3	28	10	4	0·57	+0·23	7	8
	Yarmouth	58	30	45·9	35·6	40·6	− 0·8	11	24	4	0·23	−0·17	*	*
	Geldeston	61	30	48·5	36·7	42·4	+ 0·6	25	15	5	0·26	−0·09	11	13
	Cambridge	61	24	51·3	35·4	43·1	+ 1·3	35	18	5	0·37	+0·07	8	10
	Rothamsted	60	19	50·6	33·9	42·0	+ 0·6	24	23	6	0·32	−0·06	*	*
	Ingatestone	60	23	50·8	33·7	42·0	− 0·4	25	23	4	0·37	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	60	28	49·3	34·7	41·8	+ 0·5	20	29	6	0·45	+0·10	14	17
	Loughborough	64	29	51·4	36·1	43·5	+ 2·2	35	17	4	0·30	−0·03	*	*
	Leicester	61	28	51·3	38·4	44·7	+ 3·8	34	10	4	0·49	+0·14	4	5
	Cheadle ℳ	58	27	46·6	35·6	40·9	+ 0·8	13	24	5	0·78	+0·28	*	*
	Churchstoke ℳ	60	24	47·3	35·2	41·1	+ 0·1	15	26	6	0·37	−0·05	11	13
	Hereford ℳ	61	28	50·9	35·2	42·8	+ 0·6	34	19	6	0·61	+0·13	*	*
	Cirencester	58	24	48·9	33·4	40·9	− 0·9	19	33	4	0·42	−0·05	9	11
	Oxford	60	20	50·3	34·6	42·2	− 0·1	32	21	6	0·41	+0·06	6	7
5. ENGLAND, S.	London†	62	21	51·7	34·9	43·1	+ 0·2	38	20	3	0·42	+0·11	5	6
	Strathfield Turgiss ℳ	61	18	52·2	33·3	42·6	− 0·2	41	24	4	0·22	−0·11	*	*
	Dungeness	50	22	45·3	32·6	38·8	− 4·9	9	34	4	0·16	−0·26	*	*
	Hastings (St. Leonard's)	53	26	46·4	36·9	41·5	− 1·5	12	20	5	0·38	−0·04	16	19
	Southampton	58	22	49·1	37·0	42·9	− 0·7	27	14	6	0·68	+0·23	12	14
	Hurst Castle	50	25	45·4	34·4	39·7	− 4·2	10	28	6	0·93	+0·53	*	*
	Stowell ℳ	58	19	49·1	35·8	42·3	0·0	28	17	6	1·01	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	55	30	46·3	40·1	43·1	+ 2·4	16	5	5	1·20	−0·33	*	*
	Glasgow	54	31	43·4	37·0	40·1	− 0·8	4	18	6	1·40	+0·84	1	1
	Ardrossan	49	31	43·4	36·6	39·9	− 1·0	4	19	5	0·82	+0·27	*	*
	Douglas (Isle of Man)	54	32	44·4	38·4	41·3	− 1·1	7	14	7	1·64	+1·00	3	4
7. ENGLAND, N.W.	Newton Reigny (Penrith)	60	27	47·0	36·2	41·4	+ 1·0	14	22	4	0·41	−0·08	5	6
	Barrow-in-Furness	49	30	44·0	35·4	39·6	− 3·3	6	24	6	1·26	+0·73	*	*
	Stonyhurst	57	28	45·9	37·3	41·5	+ 0·2	11	18	5	1·28	+0·53	2	2
	Blackpool ℳ	54	27	45·6	35·1	40·2	− 2·7	10	26	4	1·08	+0·60	1	1
	Manchester	58	29	47·9	37·7	42·7	+ 1·1	23	12	7	0·78	+0·24	*	*
	Liverpool Obsy (Bidston)	56	30	47·7	36·4	41·9	− 0·7	16	23	7	0·67	+0·29	*	*
	Llandudno ℳ	57	32	47·4	38·4	42·7	− 1·0	20	10	4	0·44	−0·01	7	8
	Holyhead	57	32	47·6	37·9	42·6	− 1·4	21	11	7	1·14	+0·65	*	*
8. ENGLAND, S.W.	Llandovery	57	17	49·9	36·9	43·2	+ 0·4	30	14	6	1·64	+0·92	*	*
	Pembroke	48	28	44·3	36·1	40·1	− 4·7	6	22	6	1·51	+0·98	10	12
	Arlington (N. Devon)	52	22	47·3	36·6	41·8	− 0·8	15	22	6	1·94	+1·20	*	*
	Cullompton ℳ	61	22	49·8	37·2	43·3	0·0	29	13	5	1·23	+0·69	9	11
	Falmouth	55	31	49·5	41·4	45·3	+ 0·1	26	2	6	1·54	+0·79	6	7
	Plymouth	53	29	49·0	39·1	43·9	− 1·0	25	8	6	1·58	+1·03	5	6
	Prawle Point	59	30	48·1	38·1	43·0	− 1·2	23	11	6	1·10	?	*	*
9. IRELAND, N.	Malin Head	54	26	47·7	36·9	42·1	+ 0·4	22	14	5	0·88	?	*	*
	Londonderry	58	31	46·8	40·1	43·4	+ 1·6	18	5	7	0·55	−0·08	*	*
	Mullaghmore	56	33	50·4	39·7	44·9	+ 2·0	30	6	5	0·48	−0·17	*	*
	Belmullet	54	32	48·4	38·9	43·5	− 1·7	24	9	7	0·76	?	*	*
	Markree Castle	59	26	50·4	37·6	43·8	+ 1·3	31	12	6	0·57	−0·08	4	5
	Brookeborough	57	29	48·6	39·2	43·8	+ 3·0	24	8	5	1·18	?	*	*
	Armagh	59	27	48·4	38·6	43·4	+ 1·0	24	10	6	0·63	+0·15	1	1
	Donaghadee	59	30	46·7	37·1	41·8	− 1·6	13	20	6	0·90	+0·45	*	*
	Edgeworthstown	60	28	50·1	37·1	43·4	− 2·5	30	14	4	0·96	+0·31	*	*
10. IRELAND, S.	Dublin	60	33	50·3	40·5	45·3	+ 1·9	29	4	6	0·69	+0·21	11	13
	Parsonstown	61	26	51·9	37·1	44·3	+ 1·6	37	14	5	0·61	+0·09	16	19
	Kilkenny	62	25	51·7	37·4	44·3	+ 1·7	35	13	6	0·59	+0·09	*	*
	Waterford	54	28	48·4	38·6	43·4	− 0·9	24	10	6	1·75	+1·06	*	*
	Roche's Point	52	30	48·9	39·7	44·2	− 0·6	25	6	6	2·02	+1·19	*	*
	Valencia	56	30	52·1	41·3	46·5	+ 0·6	34	2	6	1·32	+0·37	15	18
	Killarney	59	22	51·9	39·4	45·5	+ 0·9	35	7	6	1·01	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	35	51·1	42·1	46·5	− 0·1	32	0	6	1·47	+0·92	*	*
	Jersey (Noirmont)	57	32	48·9	39·3	44·0	+ 0·1	25	8	5	1·05	+0·53	5	6

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

Note.—The queries inserted to the Temperature readings at Waterford for last week can be erased; for the Rainfall the following values may be inserted: "0" "—" "−0·69."

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 13.] *New Series.* WEEK ENDING MONDAY, 29TH MARCH, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 52.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	34	49·8	40·4	45·0	5 above.	28	4	44	− 52	545	+130
	1. SCOTLAND, EAST	64	35	53·5	42·2	47·8	7 above.	41	0	75	− 67	632	+170
	2. ENGLAND, N.E.	62	36	56·3	42·6	48·7	7 above.	47	0	73	− 74	621	+206
	3. ENGLAND, EAST	65	34	56·2	43·8	49·9	7 above.	55	0	96	−101	684	+249
	4. MIDLAND COUNTIES	65	36	56·7	44·8	50·6	8 above.	60	0	108	−107	650	+224
	5. ENGLAND, SOUTH	65	39	54·2	41·7	49·3	5 above.	51	0	107	−126	555	+226
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	60	37	50·7	43·3	46·9	5 above.	34	0	71	− 89	509	+170
	7. ENGLAND, N.W.	64	36	54·2	44·9	49·4	6 above.	52	0	89	− 75	557	+225
	8. ENGLAND, S.W.	64	34	53·0	45·4	49·1	4 above.	50	0	121	−156	462	+258
	9. IRELAND, NORTH	62	31	52·2	43·3	47·5	4 above.	39	0	109	−105	428	+129
	10. IRELAND, SOUTH	60	36	53·9	44·6	49·0	4 above.	49	0	162	−149	362	+157
	— CHANNEL ISLANDS	63	43	53·7	45·8	49·6	3 above.	53	0	185	−138	198	+109

	DISTRICTS. (See p. 52.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	4	2 less.	70	+ 7	9·7	− 0·2	21	24	205	+17	25	+ 3
	1. SCOTLAND, EAST	4	4	1 less.	55	+ 9	5·9	− 0·1	15	17	193	−56	23	− 6
	2. ENGLAND, N.E.	4	4	1 less.	56	+11	6·5	+ 0·6	18	21	167	−25	19	− 3
	3. ENGLAND, EAST	5	4	1 more.	54	+ 8	5·0	− 1·7	14	16	198	−53	22	− 6
	4. MIDLAND COUNTIES	5	9	5 more.	49	+ 5	6·5	− 0·3	10	11	173	−50	20	− 5
	5. ENGLAND, SOUTH	5	6	2 more.	48	+ 5	6·3	− 0·8	12	14	180	−55	20	− 6
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	6	14	5 more.	57	+ 2	11·1	0·0	16	18	150	−44	17	− 5
	7. ENGLAND, N.W.	5	10	6 more.	54	+ 6	9·0	+ 0·5	20	23	171	−20	20	− 2
	8. ENGLAND, S.W.	6	16	9 more.	57	+ 6	10·7	− 1·0	14	16	186	−69	21	− 7
	9. IRELAND, NORTH	7	14	9 more.	58	− 1	10·0	+ 1·0	13	14	143	−74	16	− 9
	10. IRELAND, SOUTH	7	20	13 more.	55	0	11·2	− 0·8	19	22	203	−46	23	− 5
	— CHANNEL ISLANDS	7	8	2 more.	68	+11	8·9	− 0·1	28	32	262	−56	29	− 5

General Remarks.

Weather has been in a mild, changeable condition generally. Heavy rain has fallen over the western districts and showers at our eastern and southern stations. Thunderstorms were experienced in some parts of England during the evening of the 29th.

Temperature has been above the mean, the excess ranging from 3° in the "Channel Islands" to 6° in "England, N.W.", 7° in "Scotland, E.", "England, N.E.", and "England, E.", and to 8° in the "Midland Counties". The highest of the maxima were registered on the 24th, and were very high for the season. Over eastern, central, and southern England the thermometer rose to 65°, in the east of Scotland and the western parts of England to 64°, and elsewhere to between 58° (in "Scotland, N.") and 63° (in the "Channel Islands"). The lowest of the minima were recorded either on the 28th or 29th, and ranged from 31° in "Ireland, N." to 39° in "England, S.", and to 43° in the "Channel Islands". During the greater part of the week, however, the minima ranged, in most places, between 45° and 50°.

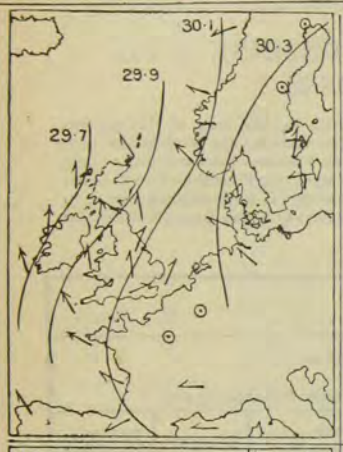
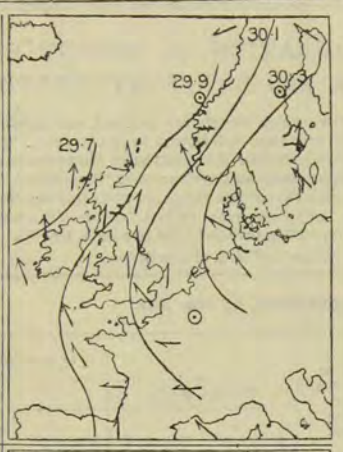
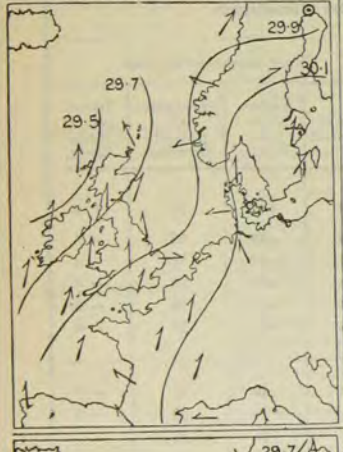
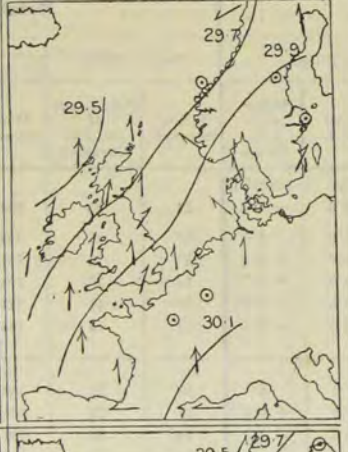
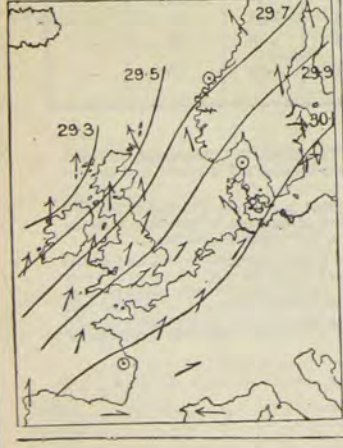
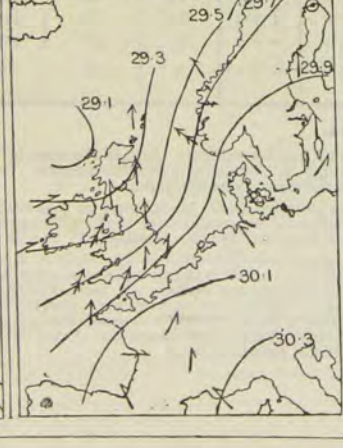
Rainfall has been slightly less than the mean in "Scotland, N.", "Scotland, E.", and "England, N.E.", but more in all other districts. Over Ireland and western and central England the excess is considerable.

Bright sunshine shows an increase on that reported last week, although it has still been deficient. The percentage of the possible amount of duration varied from 11 in the "Midland Counties" to 24 in "Scotland, N." and 32 in the "Channel Islands".

Depressions observed.—During the whole of this period pressure was highest on the Continent and lowest to the westward and northward of our Islands. A series of large depressions skirted our western and north-western coasts, but the only disturbances which came directly over us, were some shallow subsidiaries observed on the 28th and 29th. Fresh or strong Southerly to South-Westerly or Westerly winds have consequently been general over the United Kingdom. On the 26th a Southerly gale was experienced at some of our western stations.

E 21687. 350.—4/86. Wt. 58. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather during the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, March 23.** *Weather* fair in the east of Scotland and north of Ireland, but cloudy elsewhere, with rain or passing showers in many places. Rain falling later at all our western and northern stations. *Temperature* risen a few degrees over Ireland and England; readings ranging from 54° at Mullaghmore and 52° at Parsonstown, Cambridge, and in London to 43° at Sumburgh Head and 41° at Dungeness. Subsequently rising to 62° at Loughborough, Oxford, and in London, 63° at Nairn, and 64° at Leith. *Wind* South-Easterly or Southerly; moderate in force on all our north and east coasts, but fresh or strong in the west and south-west. *Sea* rough on our south-west coasts, but moderate to smooth elsewhere. *Barometer* falling in most parts of our Islands and France, but rising over Scandinavia, Denmark, and the Netherlands. Pressure highest over the Baltic, and depressions moving in a northerly direction outside our extreme western coasts. Rise taking place in Ireland later.	
		Wednesday, March 24. *Weather* fine in Denmark, the Netherlands, the east of France, and the south-east of England, but cloudy or overcast elsewhere, with rain at some of our western and northern stations. Rain falling in south later, and lightning seen at Mullaghmore at night. *Temperature* fallen a little in England; readings ranging from 54° at Holyhead and 53° at Nairn to 41° at Yarmouth. Highest maxima 65° at Loughborough and Cambridge, 64° in London, and 63° at Oxford. *Wind* South-Westerly at most of the Scotch stations, but South-Easterly elsewhere; strong in force on our south-west coasts, but light or moderate elsewhere. Subsequently veering to South-West over the western part of the Channel. *Sea* rough at Valencia and Scilly; moderate to smooth elsewhere. *Barometer* falling at all but our northern stations. Anticyclone still lying over the Baltic, with depressions to the westward and south-westward of Ireland. Fall extending to Scotland later.	
		**Thursday, March 25.** *Weather* fine at many of the Continental stations, but cloudy in our Islands, with rain locally, and fog at Shields and Prawle Point. Rain falling later at all our western stations, and distant thunder heard at Jersey in evening. *Temperature* risen several degrees over eastern and central England, but changed irregularly elsewhere; readings ranging from 53° at Nairn and Liverpool to 42° at Sumburgh Head. Highest maxima 61° at York and Loughborough, 60° at Liverpool, and 59° at Nairn and Shields. *Wind* Easterly on the eastern shores of the North Sea, and also in the south of France, but Southerly or South-Westerly elsewhere; light or moderate in force generally, but strong at some of the western stations. *Sea* rather rough at the mouths of the English and St. George's Channels, and also off the north of Scotland. *Barometer* rising at our southern and the French stations, but falling elsewhere. Large high pressure system lying over Central Europe, with depression off the north-west of Scotland. Slight rise taking place later in many parts of the Kingdom.	
		**Friday, March 26.** *Weather* fine in the eastern parts of Great Britain and also in the North of Ireland, but cloudy elsewhere, with rain at several of our western stations. Rain falling generally later; heavily in the west. *Temperature* changed little and irregularly; readings ranging from 52° at Valencia and Cambridge to 44° at Aberdeen. *Wind* Southerly or South-Westerly, moderate in force on our east and south coasts, but strong in the west and south-west. Subsequently increasing to strong breeze from South-West over the Channel, but veering to West in Ireland. *Sea* rough on our western and extreme northern coasts. *Barometer* falling at all but our southern and the French stations. Anticyclone lying over the south of France, with large and rather deep depression to the north-westward of our Islands. Depression subsequently moving northwards, and barometer rising in extreme west.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

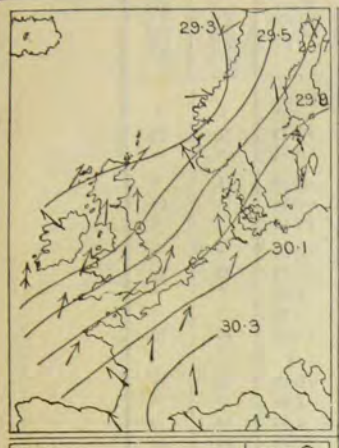
Weather

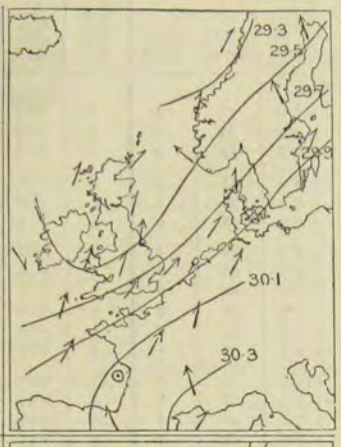
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, March 27.

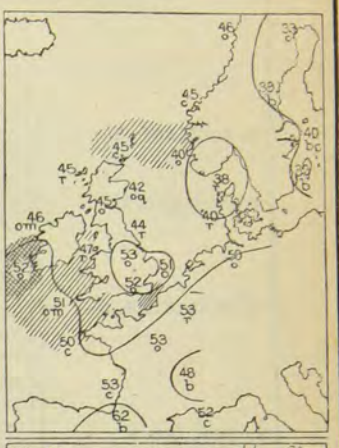
Weather fine in Sweden and the south of France, but dull in most other localities, with rain in many places. Rain falling later in nearly all parts of the Kingdom.

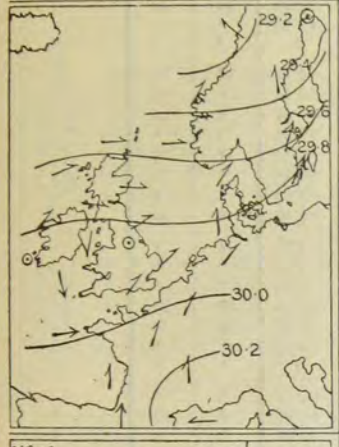
Temperature fallen slightly in the north of our Islands, but risen elsewhere; readings ranging from 54° at Cambridge to 42° at Aberdeen.

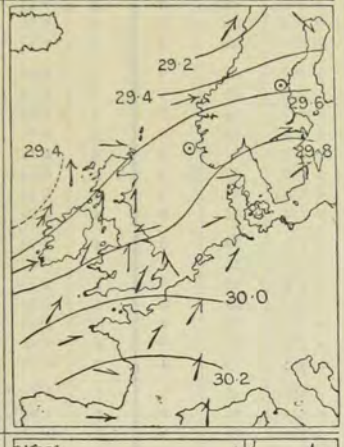
Wind Easterly or South-Easterly over the northern parts of Ireland and England, but Southerly or South-Westerly elsewhere; light or moderate in force in the North, but strong to a gale in the South. Subsequently veering to North-West in Ireland.

Sea high at Valencia and rough on our west and south-west coasts generally, as well as at Sumburgh Head.

Barometer rising on our northern coasts and also in France, but falling elsewhere. Pressure highest in the south of France, with a large area of low readings to the northward of our Islands, and a small subsidiary depression over Ireland. Small depression subsequently moving eastwards and barometer rising in west.







Sunday, March 28.

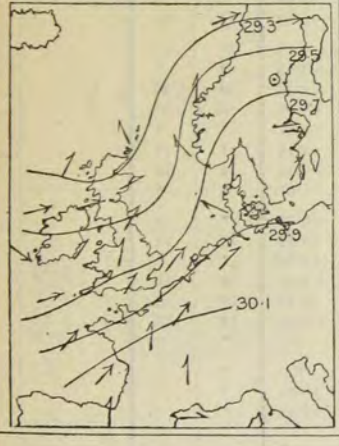
Weather fine at all our more western and northern stations, but dull elsewhere, with rain in many places and fog at Prawle Point and Hurst Castle. Rain falling in west and north later.

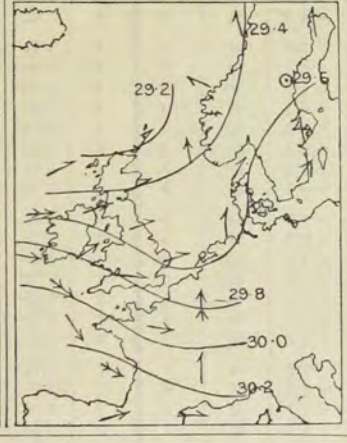
Temperature fallen a few degrees generally; readings ranging from 51° at Yarmouth to 39° at Nairn.

Wind Northerly or North-Westerly over the St. George's Channel and Southerly in France, but Westerly or South-Westerly elsewhere; light or moderate in force in most places. Subsequently backing to the Southward on our extreme north-west coasts, and increasing to strong breeze or gale.

Sea rough at Scilly, moderate to smooth elsewhere.

Barometer rising in most parts of our Islands, but falling at the Continental stations. Pressure still highest in the south of France, with area of low readings off the west of Norway, and small shallow depression over the south-west of England. Brisk fall taking place in west later.





Monday, March 29.

Weather changeable and showery in most places, with thunderstorms in afternoon in many parts of England.

Temperature fallen at all but our extreme northern stations; readings ranging from 47° at Scilly, Oxford, and Jersey to 40° at Stornoway, Mullaghmore, Donaghadee, and Parsonstown.

Wind Westerly in Ireland, but South-Westerly or Southerly over Great Britain and France, and South-Easterly on eastern shores of North Sea. Strong in force at some of our western and southern stations, but light or moderate elsewhere.

Sea rough at Valencia and Scilly, and rather rough in the Channel, but moderate to smooth elsewhere.

Barometer falling at all but the Swedish stations. Pressure still highest in the south of France, with area of low readings to the northward of our Islands, and shallow subsidiary disturbances over England and the St. George's Channel. Depressions subsequently moving eastwards, and barometer rising in most parts of the Kingdom.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟹ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 49 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	51	37	47·7	39·9	43·7	+ 3·9	21	6	5	0·29	−0·31	*	*
	Stornoway	52	34	49·3	41·1	45·1	+ 4·0	25	3	7	0·91	+0·11	21	24
	Wick	58	34	52·4	40·3	46·2	+ 6·3	37	5	2	0·05	−0·36	*	*
1. SCOTLAND, E.	Nairn	63	35	56·0	43·0	49·3	+ 8·0	51	0	3	0·09	−0·28	*	*
	Aberdeen	57	35	51·0	40·6	45·9	+ 5·8	33	4	4	0·35	−0·16	15	17
	Leith	64	39	53·4	43·1	48·1	+ 5·6	43	0	5	0·71	+0·18	*	*
2. ENGLAND, N.E.	Alnwick Castle	56	36	53·1	40·6	46·7	+ 5·6	39	4	5	0·42	−0·08	*	*
	Durham	62	37	56·7	43·3	49·8	+ 9·0	55	0	4	0·35	−0·14	22	25
	Shields	59	39	54·9	42·7	48·6	+ 7·0	46	0	2	0·18	−0·20	*	*
	Scarborough ℳ	59	40	56·1	44·2	50·0	+ 8·4	56	0	4	0·30	−0·11	*	*
	York	62	40	58·1	44·1	50·9	+ 8·3	62	0	4	0·51	+0·03	14	16
	Spurn Head	58	37	52·7	40·4	46·4	+ 4·3	38	4	4	0·31	?	*	*
3. ENGLAND, E.	Hillington ℳ	61	39	58·2	47·2	52·5	+11·1	74	0	5	0·40	+0·05	15	17
	Yarmouth	57	37	51·6	41·7	46·5	+ 4·1	33	1	5	0·31	−0·09	*	*
	Geldeston	58	34	55·6	43·2	49·2	+ 6·0	50	0	5	0·35	0·00	14	16
	Cambridge	65	37	59·0	43·0	50·8	+ 7·8	62	0	4	0·42	+0·08	14	16
	Rothamsted	62	39	56·6	44·8	50·5	+ 8·1	60	0	5	0·62	+0·21	*	*
	Ingatestone	59	36	56·4	43·1	49·6	+ 5·8	53	0	4	0·44	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	63	40	58·1	43·6	50·6	+ 8·7	60	0	5	0·26	−0·11	12	14
	Loughborough	65	41	58·4	44·6	51·3	+ 8·7	65	0	4	0·99	+0·64	*	*
	Leicester	65	39	59·2	46·2	52·5	+10·1	74	0	4	0·96	+0·61	9	10
	Cheadle ℳ	60	37	54·1	44·2	49·0	+ 7·4	49	0	5	0·81	+0·30	*	*
	Churchstoke ℳ	61	37	55·0	45·3	50·0	+ 7·7	56	0	5	1·12	+0·72	11	13
	Hereford ℳ	62	41	56·7	44·9	50·6	+ 7·2	60	0	5	0·94	+0·54	*	*
	Cirencester	62	36	55·1	44·4	49·6	+ 6·6	53	0	5	1·17	+0·69	7	8
	Oxford	63	40	57·0	44·9	50·8	+ 7·2	62	0	4	0·79	+0·43	9	10
5. ENGLAND, S.	London†	64	41	58·1	45·7	51·7	+ 7·1	68	0	4	0·28	−0·08	7	8
	Strathfield Turgiss ℳ	65	40	?57·8	?45·7	?51·6	+ 7·9	?67	0	4	0·53	+0·18	*	*
	Dungeness	52	41	50·1	43·0	46·5	+ 1·4	32	0	1	0·10	−0·32	*	*
	Hastings (St. Leonard's)	60	40	52·6	44·2	48·1	+ 4·2	43	0	4	0·61	+0·18	17	20
	Southampton	61	42	55·0	46·1	50·4	+ 5·7	59	0	6	1·04	+0·57	12	14
	Hurst Castle	56	41	51·6	43·0	47·2	+ 2·1	36	0	6	0·87	+0·45	*	*
	Stowell ℳ	60	39	53·9	45·1	49·4	+ 6·2	52	0	7	0·98	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	59	37	52·2	44·1	48·0	+ 6·3	42	0	7	2·73	+1·42	*	*
	Glasgow	60	37	51·5	43·6	47·4	+ 5·4	38	0	5	1·16	+0·62	9	10
	Ardrossan	57	40	48·6	42·9	45·7	+ 3·6	26	0	6	0·46	−0·08	*	*
	Douglas (Isle of Man)	54	37	50·3	42·7	46·4	+ 2·8	31	0	7	1·42	+0·82	22	25
7. ENGLAND, N.W.	Newton Reigny (Penrith)	64	36	54·3	43·0	48·5	+ 6·9	46	0	5	1·04	+0·59	27	31
	Barrow-in-Furness	57	40	50·4	43·0	46·6	+ 2·4	32	0	3	1·49	+1·00	*	*
	Stonyhurst	60	38	54·1	45·7	49·8	+ 7·2	55	0	5	1·04	+0·36	19	22
	Blackpool ℳ	63	41	53·2	44·6	48·8	+ 4·7	48	0	4	1·36	+0·91	20	23
	Manchester	63	39	57·0	45·8	51·2	+ 8·8	64	0	6	0·79	+0·27	*	*
	Liverpool Obsy (Bidston)	60	42	55·1	46·1	50·5	+ 6·5	60	0	5	0·51	+0·14	*	*
	Llandudno ℳ	63	40	57·1	46·2	51·5	+ 6·7	67	0	4	0·57	+0·14	14	16
	Holyhead	63	42	52·7	44·4	48·2	+ 2·9	43	0	6	1·44	+0·97	*	*
8. ENGLAND, S.W.	Llandovery	64	34	55·9	43·9	49·7	+ 6·3	54	0	6	4·28	+3·59	*	*
	Pembroke	53	42	49·0	44·0	46·4	+ 0·7	31	0	7	1·24	+0·72	13	15
	Arlington (N. Devon)	61	39	54·0	45·9	49·8	+ 4·8	55	0	6	1·60	+0·88	*	*
	Cullompton ℳ	61	42	55·3	46·5	50·8	+ 6·1	62	0	5	1·03	+0·45	10	11
	Falmouth	55	38	51·9	46·2	49·0	+ 3·0	49	0	7	0·98	+0·23	19	22
	Plymouth	60	45	54·4	47·1	50·7	+ 4·7	61	0	6	0·88	+0·32	13	15
	Prawle Point	54	42	50·6	44·1	47·3	+ 2·1	37	0	6	0·94	?	*	*
9. IRELAND, N.	Malin Head	58	39	52·0	44·1	47·9	+ 5·2	41	0	7	?0·74	?	*	*
	Londonderry	62	35	55·1	43·9	49·3	+ 6·4	51	0	7	1·21	+0·61	*	*
	Mullaghmore	59	39	52·7	45·0	48·7	+ 4·2	47	0	7	1·38	+0·78	*	*
	Belmullet	55	39	50·0	44·7	47·3	+ 1·3	37	0	7	1·44	?	*	*
	Markree Castle	59	35	52·1	42·6	46·7	+ 3·0	33	0	7	1·67	+1·11	10	11
	Brookeborough	58	31	51·2	42·5	46·7	+ 4·0	33	0	7	1·63	?	*	*
	Armagh	61	35	53·8	43·4	48·5	+ 4·8	46	0	7	1·51	+1·03	15	17
	Donaghadee	54	34	49·6	41·4	45·4	+ 0·7	26	2	6	1·16	+0·71	*	*
	Edgeworthstown	57	34	53·3	41·7	47·3	+ 4·3	38	1	6	1·89	+1·38	*	*
10. IRELAND, S.	Dublin	60	37	56·4	45·1	50·6	+ 5·8	60	0	6	0·68	+0·20	28	32
	Parsonstown	60	37	56·0	44·3	50·0	+ 6·4	56	0	7	1·89	+1·38	16	18
	Kilkenny	58	36	54·6	44·1	49·2	+ 5·6	50	0	6	0·92	+0·41	*	*
	Waterford	52	38	50·5	43·6	47·0	+ 1·8	35	0	7	2·01	+1·33	*	*
	Roche's Point	53	39	51·4	44·1	47·5	+ 1·8	39	0	7	1·79	+0·96	*	*
	Valencia	55	40	53·6	46·3	48·8	+ 2·0	48	0	7	2·71	+1·76	14	16
	Killarney	57	36	54·5	45·0	49·6	+ 4·7	53	0	7	3·76	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	44	52·3	45·7	48·9	+ 1·6	48	0	7	0·90	+0·35	*	*
	Jersey (Noirmont)	63	43	55·0	45·9	50·3	+ 5·0	58	0	6	0·59	+0·09	28	32

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 14.] *New Series.* WEEK ENDING MONDAY, 5TH APRIL, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 56.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	54	31	46·7	34·1	40·0	1 below.	13	28	57	− 59	573	+140
	1. SCOTLAND, EAST	59	? 23	50·7	? 34·7	? 42·3	?0 (average).	? 33	? 20	108	− 62	652	+168
	2. ENGLAND, N.E.	59	35	52·0	38·6	45·0	2 above.	35	10	108	− 68	631	+198
	3. ENGLAND, EAST	62	35	54·6	39·5	46·7	2 above.	43	7	139	− 97	691	+237
	4. MIDLAND COUNTIES	62	34	51·7	39·0	46·0	2 above.	41	8	149	−108	658	+211
	5. ENGLAND, SOUTH	60	35	52·2	41·3	46·5	1 above.	34	2	141	−136	557	+216
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	53	32	47·2	37·3	42·0	2 below.	15	13	86	−107	522	+166
	7. ENGLAND, N.W.	63	33	50·1	39·0	44·2	1 below.	28	8	117	− 81	565	+204
	8. ENGLAND, S.W.	61	32	51·2	40·9	45·8	0 (average).	31	3	152	−160	465	+253
	9. IRELAND, NORTH	60	27	49·6	36·0	42·5	2 below.	29	17	138	−110	445	+130
	10. IRELAND, SOUTH	58	30	51·5	38·5	44·7	1 below.	34	10	196	−153	372	+156
	— CHANNEL ISLANDS	58	40	52·5	42·8	47·4	0 (average).	38	0	223	−138	198	+107

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 56.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	8	2 more.	75	+ 9	10·5	0·0	33	36	238	+10	26	+ 2
	1. SCOTLAND, EAST	6	5	1 more.	61	+12	6·4	0·0	44	48	237	−46	25	− 5
	2. ENGLAND, N.E.	6	6	2 more.	62	+14	7·1	+ 0·8	31	34	198	−35	21	− 3
	3. ENGLAND, EAST	4	4	0 (average)	58	+10	5·4	− 0·6	30	34	228	−74	23	− 7
	4. MIDLAND COUNTIES	6	12	8 more.	55	+ 8	7·7	+ 0·5	32	36	205	−59	21	− 6
	5. ENGLAND, SOUTH	5	6	1 more.	53	+ 7	6·9	− 0·6	27	30	207	−69	21	− 7
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	7	17	5 more.	64	+ 6	12·8	+ 1·1	25	28	175	−66	18	− 7
	7. ENGLAND, N.W.	7	15	10 more.	61	+10	10·5	+ 1·5	18	20	189	−47	20	− 4
	8. ENGLAND, S.W.	6	9	3 more.	63	+ 8	11·6	− 0·7	29	32	215	−81	22	− 8
	9. IRELAND, NORTH	7	10	5 more.	65	+ 2	11·0	+ 1·5	21	23	164	−93	17	−10
	10. IRELAND, SOUTH	7	12	6 more.	62	+ 3	12·4	+ 0·7	18	20	221	−77	23	− 7
	— CHANNEL ISLANDS	6	5	0 (average)	74	+14	9·4	− 0·2	39	43	301	−60	30	− 6

General Remarks.

Weather has been cloudy or dull generally, with frequent and rather heavy rain. Some clear and bright intervals, however, have prevailed at times, especially over England and the east of Scotland. Thunderstorms were experienced in some localities during the early part of the period, and in the west and north aurora was observed.

Temperature has been 1° or 2° above the mean over southern, central, eastern, and north-eastern England, but 1° or 2° below it in most other parts of the Kingdom. The highest of the maxima, which were recorded on April 2nd, ranged from 53° to 59° in Scotland, from 58° to 60° in Ireland, and from 59° to 62° in England. The lowest of the minima were generally registered either on March 30th or April 1st, and varied from 27° in "Ireland, N." to 35° in "England, N.E.", "England, E.", and "England, S.", and to 40° in the "Channel Islands". A minimum of 23° was reported at Nairn ("Scotland, E.") on April 2nd, but its accuracy appears doubtful.

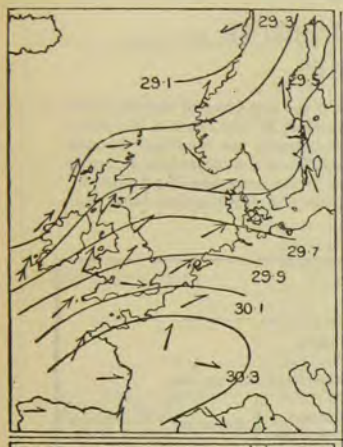
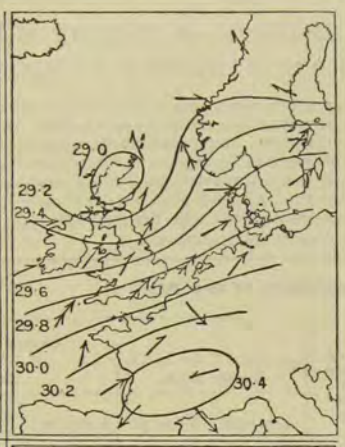
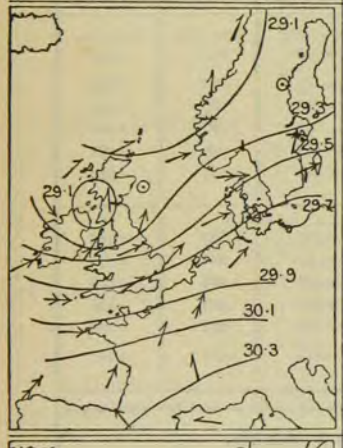
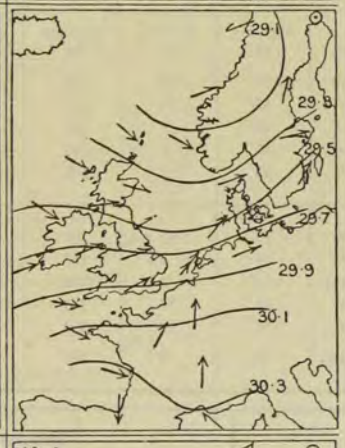
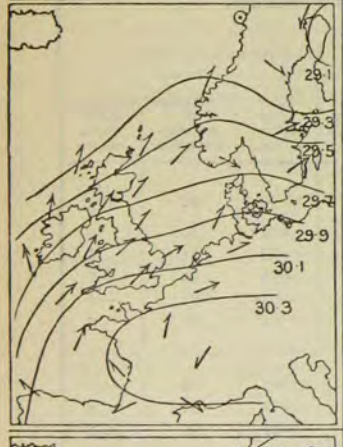
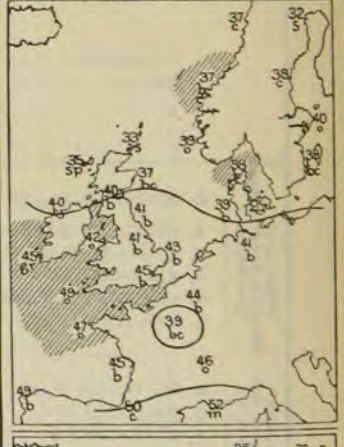
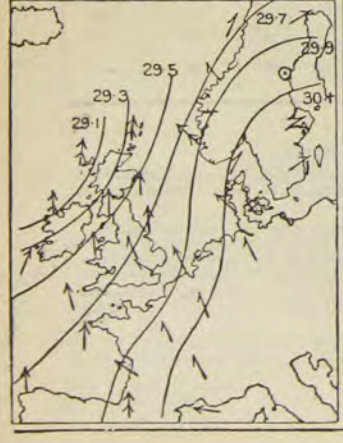
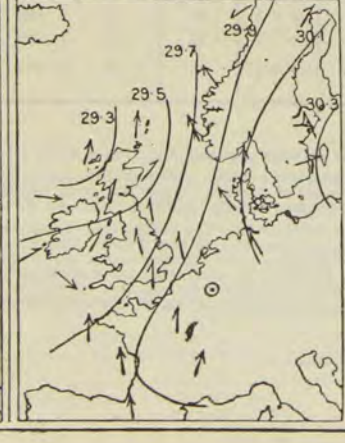
Rainfall has been more than the mean in nearly all districts.

Bright sunshine has been more prevalent than it was last week, the percentages of the possible amount of duration ranging from 20 in "England, N.W." and "Ireland, S.", to 43 in the "Channel Islands" and 48 in "Scotland, E."

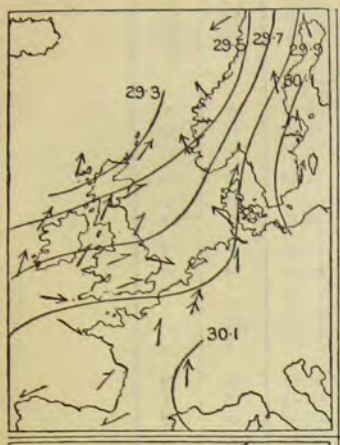
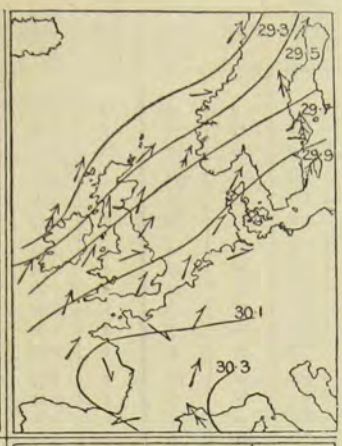
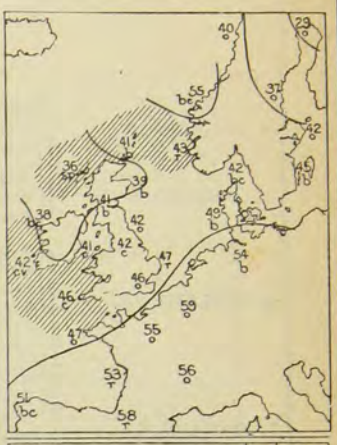
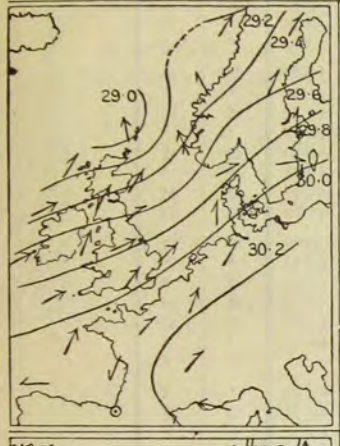
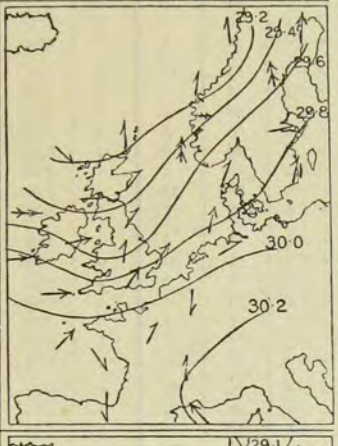
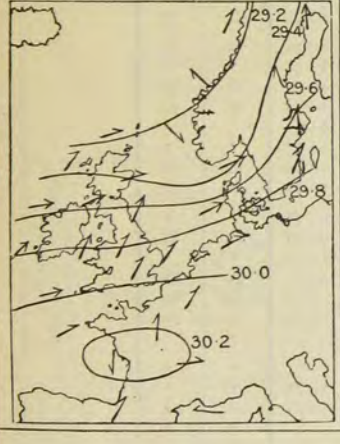
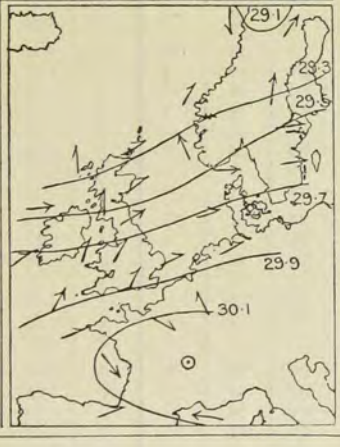
Depressions observed.—The distribution of barometric pressure continued cyclonic, the barometer being highest over France, with numerous depressions passing over, or skirting, our western and northern coasts. Some of these disturbances were very deep, and the Southerly to Westerly wind, which prevailed in all parts of the Kingdom, was fresh to strong, occasionally increasing to the force of a gale. The gale experienced over our north-western districts on March 30th was unusually severe.

E 21775. 350.—4/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, March 30.** *Weather* fair at our eastern and most of the Continental stations, but dull and rainy in the west. Rain falling later in all parts of Ireland and England, with sleet in Scotland. *Temperature* risen a little on our south-west coasts, but fallen elsewhere; readings ranging from 49° at Scilly to 38° at Stornoway and Nairn. *Wind* chiefly South-Westerly; moderate or fresh in force over Great Britain, but strong to a gale in the west and south of Ireland. Subsequently increasing to whole gale on our north-west coasts, and to fresh or strong gale in all other parts of Ireland and England. *Sea* high at Scilly and Valencia, and rather rough on our south-west coasts generally, as well as at Sumburgh Head and Mullaghmore. *Barometer* falling in Sweden and also on our extreme western coasts, but rising elsewhere. Pressure highest in the south of France, with deep depression approaching the west of Ireland. Depression subsequently moving quickly north-eastwards, and fall of barometer becoming general.	
		**Wednesday, March 31.** *Weather* squally and showery generally, with snow at Aberdeen and sleet or hail in the north of Ireland. Showers falling generally later, with thunderstorms at Scilly and Hurst Castle and lightning at Liverpool. *Temperature* fallen in the west and north, but risen in the east; readings ranging from 48° at Cambridge, Yarmouth, and in London to 35° at Stornoway, Nairn, and Aberdeen. *Wind* calm or light Westerly in the north of Scotland, but fresh or strong from West in Ireland, and strong to a gale from South-West over England, the Netherlands, and the north of France. Subsequently veering to the Westward over England, and moderating somewhat. *Sea* high in the English and St. George's Channel, and rough off the west of Ireland as well as at Yarmouth. *Barometer* falling at all but our extreme western stations. Pressure highest in the south of France, with centre of a new and deep depression over the North Channel. Depression subsequently moving north-eastwards, and barometer rising generally.	
		**Thursday, April 1.** *Weather* fine in most parts of Western Europe, but snow falling in the Shetlands and Hebrides, and rain in the south of Ireland. Rain falling later at nearly all our western and northern stations. *Temperature* risen slightly in the west and north, but fallen elsewhere; readings ranging from 49° at Scilly to 33° at Sumburgh Head. *Wind* Southerly in Ireland but South-Westerly elsewhere; fresh or strong in force in most places. Subsequently increasing to gale from South or South-East on our west and south-west coasts. *Sea* rough at Scilly and rather rough on our west and south-west coasts generally. *Barometer* rising at all stations excepting Valencia. Anticyclone lying over France, with lowest pressures in the north of Scandinavia. Deep depression subsequently appearing off the west of Ireland, and barometer falling at all our western and southern stations.	
		**Friday, April 2.** *Weather* fair in most parts of Western Europe, but cloudy on our west and south-west coasts, and rainy at Jersey and Lorient. Rain falling later in all parts of the Kingdom. *Temperature* risen several degrees; readings ranging from 56° in London to 44° at Sumburgh Head. *Wind* Southerly or South-Easterly in nearly all places; fresh or strong in force generally, with hard gales over the northern parts of Ireland and Scotland. Subsequently veering to South-West or West on our western and northern coasts, and moderating in force. *Sea* high in the north-west, and rough in the west and north generally. *Barometer* falling at all but the Scandinavian stations. Pressure high over Central Europe, and depression of previous day passing along the west coast of Scotland. Rise taking place in west and north later.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, April 3.** *Weather* rainy in France and the extreme south-east of England, but fair in most other localities. Rain setting in on our west coasts later. *Temperature* fallen several degrees in our Islands, but risen at the Continental stations; readings over the United Kingdom ranging from 47° at Cambridge and Yarmouth to 37° at Nairn and Parsonstown and 36° at Stornoway. *Wind* moderate or fresh from South-West over the greater part of our Islands and France, but strong from South-East or South on the eastern shores of the North Sea. Subsequently increasing to gale from South-West on our north and north-west coasts. *Sea* rough at Stornoway and rather rough on our south-west coasts, but moderate to smooth elsewhere. *Barometer* rising in our Islands and the west of France, but falling elsewhere. Pressure still highest over central Europe, with large depression off our extreme northern coasts, and subsidiary disturbances over the North Sea. New depression skirting the Irish and Scotch coasts later.	
		**Sunday, April 4.** *Weather* fine in Denmark and the northern and eastern parts of Great Britain, but cloudy or overcast elsewhere, with rain in many places. Showers falling later in most parts of the Kingdom. Aurora seen at Wick in the evening. *Temperature* risen in our Islands, but fallen at the Continental stations; readings varying from 51° at York, Valencia, and Scilly to 41° at Stornoway. *Wind* strong South-Westerly in our Islands, but Southerly or South-Easterly on the eastern shores of the North Sea. Subsequently veering to West at most of our western stations. *Sea* very high at Wick, and rather rough on our south-west, west, and extreme northern coasts generally. *Barometer* rising at our western, southern, and the French station, but falling elsewhere. Pressure highest over southern Europe, with centre of rather deep depression off the north of Scotland. Subsidiary disturbances subsequently appearing over Scotland and the north of England.	
		**Monday, April 5.** *Weather* fine at several of our western and northern stations, but cloudy elsewhere, with rain in the north of England and south of Scotland, and fog at the Channel stations. Showers falling later in most parts of the Kingdom. *Temperature* fallen slightly; readings ranging from 50° at Valencia and Roche Point to 40° at Sumburgh Head and Stornoway. *Wind* generally South-Westerly; great or strong in force in most places, with a gale at Oxö. *Sea* rough or rather so on many parts of our western coast, but moderate to smooth elsewhere. *Barometer* rising at all but the Scandinavian and Danish stations. Anticylone lying over France, with large area of low pressure to the northward of our Islands, and small subsidiary disturbance over the south of Norway. Fall taking place on our western and southern coasts later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇉ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 53 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	47	32	45·3	34·3	39·5	− 1·3	9	27	6	0·55	−0·01	*	*
	Stornoway	50	31	46·1	33·0	39·2	− 2·9	11	32	7	1·52	+0·82	33	36
	Wick	54	31	48·6	34·9	41·4	+ 0·3	18	27	3	0·26	−0·13	*	*
1. SCOTLAND, E.	Nairn	59	?23	50·6	?32·4	?41·1	?− 1·0	?24	?37	6	0·20	−0·15	*	*
	Aberdeen	56	31	49·9	35·4	42·3	+ 1·0	30	18	6	0·43	+0·02	44	48
	Leith	56	34	51·6	36·3	43·6	0·0	35	16	6	0·72	+0·37	*	*
2. ENGLAND, N.E.	Alnwick Castle	57	36	49·9	38·3	43·8	+ 1·6	28	10	5	0·54	+0·05	*	*
	Durham	58	35	51·9	37·5	44·4	+ 2·2	36	13	7	0·53	+0·03	34	37
	Shields	58	36	51·9	38·3	44·8	+ 2·0	35	10	5	0·32	−0·08	*	*
	Scarborough ℜ	59	36	52·7	38·9	45·5	+ 2·7	38	9	7	0·83	+0·40	*	*
	York	58	36	53·6	39·3	46·1	+ 2·0	40	8	6	0·73	+0·33	?27	?30
	Spurn Head	57	37	52·1	39·0	45·2	+ 1·8	35	8	4	0·78	?	*	*
3. ENGLAND, E.	Hillington ℜ	61	36	55·3	38·6	46·6	+ 3·6	46	10	4	0·44	+0·06	26	29
	Yarmouth	56	35	53·1	39·6	46·0	+ 2·4	38	7	4	0·35	−0·05	*	*
	Geldeston	62	37	55·1	39·7	47·0	+ 2·4	45	6	3	0·30	−0·05	33	37
	Cambridge	61	36	56·3	39·6	47·6	+ 2·9	49	7	3	0·35	−0·02	32	36
	Rothamsted	57	35	53·5	38·7	45·7	+ 0·9	40	9	6	0·63	−0·16	*	*
	Ingatestone	60	36	54·5	40·8	47·3	+ 2·0	42	3	3	0·31	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	59	35	53·1	38·0	45·2	+ 1·9	39	11	6	1·10	+0·72	32	36
	Loughborough	59	36	54·6	39·9	46·9	+ 2·7	43	6	6	1·54	+1·16	*	*
	Leicester	59	35	54·7	39·2	46·6	+ 2·7	44	8	6	0·99	+0·61	25	28
	Cheadle ℜ	55	34	51·8	36·9	44·0	+ 1·3	35	14	7	1·95	+1·44	*	*
	Churchstoke ℜ	62	37	53·4	38·7	45·7	+ 1·9	40	9	5	1·49	+1·09	42	47
	Hereford ℜ	59	37	55·1	40·1	47·2	+ 2·3	44	5	5	0·71	+0·31	*	*
	Cirencester	54	34	52·9	38·1	45·1	+ 0·7	38	11	6	1·09	+0·59	29	32
	Oxford	57	38	53·6	41·0	47·0	+ 1·6	39	3	5	0·47	+0·09	34	38
5. ENGLAND, S.	London†	60	37	55·9	42·1	48·7	+ 2·6	47	0	3	0·35	−0·05	28	31
	Strathfield Turgiss ℜ	58	35	54·9	38·3	46·2	+ 1·3	45	10	6	0·45	+0·05	*	*
	Dungeness	52	39	50·4	42·7	46·1	− 0·3	29	0	4	0·55	+0·13	*	*
	Hastings (St. Leonard's)	53	39	49·7	41·9	45·6	+ 0·2	26	0	4	0·35	−0·10	23	26
	Southampton	57	38	53·3	41·8	47·3	+ 1·6	38	1	6	0·67	+0·19	30	33
	Hurst Castle	51	38	?49·4	42·7	?45·9	?− 0·5	?27	0	4	0·58	+0·15	*	*
	Stowell ℜ	55	35	51·6	39·7	45·4	+ 1·0	33	6	6	0·97	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	50	32	46·3	33·8	39·8	− 2·9	12	30	7	3·42	+2·32	*	*
	Glasgow	53	34	48·2	37·2	42·4	− 0·9	23	13	6	0·67	+0·13	29	32
	Ardrossan	49	36	46·4	38·7	42·4	− 0·9	17	9	6	0·75	+0·21	*	*
	Douglas (Isle of Man)	51	36	47·9	39·3	43·4	− 1·4	21	8	7	1·79	+1·21	21	25
7. ENGLAND, N.W.	Newton Reigny (Penrith)	57	33	48·8	36·3	42·3	− 0·3	26	16	7	2·71	+2·28	21	23
	Barrow-in-Furness	54	36	47·1	39·0	42·9	− 2·6	19	8	7	1·67	+1·20	*	*
	Stonyhurst	58	36	49·9	38·6	44·0	+ 0·1	28	10	7	1·99	+1·39	20	22
	Blackpool ℜ	58	38	50·1	40·1	44·9	− 0·5	28	5	7	1·19	+0·66	19	21
	Manchester	59	35	?2·4	38·3	45·0	+ 1·7	37	10	7	1·51	+1·01	*	*
	Liverpool Obsy (Bidston)	60	37	52·3	39·9	44·8	− 0·5	28	6	7	0·50	+0·12	*	*
	Llandudno ℜ	58	37	52·5	39·9	45·9	0·0	36	6	6	0·89	+0·48	12	13
	Holyhead	49	37	48·0	39·9	43·8	− 2·4	21	6	7	1·19	+0·74	*	*
8. ENGLAND, S.W.	Llandovery	61	32	52·0	38·6	45·0	+ 0·4	35	10	6	2·27	+1·59	*	*
	Pembroke	48	37	46·6	40·7	43·5	− 3·2	16	4	6	0·56	+0·06	21	23
	Arlington (N. Devon)	58	36	51·3	39·4	45·1	− 0·1	33	7	6	0·88	+0·17	*	*
	Cullompton ℜ	58	36	54·1	40·4	46·9	+ 1·2	41	4	5	0·81	+0·21	28	31
	Falmouth	54	39	51·7	41·9	46·6	− 0·3	33	0	6	0·57	−0·18	33	37
	Plymouth	56	40	53·1	43·7	48·2	+ 1·1	43	0	5	0·64	+0·05	32	36
	Prawle Point	50	40	49·3	41·6	45·3	− 1·0	25	1	6	0·57	?	*	*
9. IRELAND, N.	Malin Head	55	32	49·1	34·7	41·6	− 1·9	20	28	7	0·87	?	*	*
	Londonderry	60	33	51·0	35·8	43·0	− 1·3	33	17	7	1·30	+0·72	*	*
	Mullaghmore	54	35	49·6	37·7	43·4	− 2·2	28	12	7	1·12	+0·58	*	*
	Belmullet	52	35	48·0	37·7	42·6	− 4·0	22	12	7	1·47	?	*	*
	Markree Castle	55	27	49·4	34·5	41·6	− 3·2	21	29	7	1·11	+0·54	23	26
	Brookeborough	55	33	49·6	35·8	42·4	− 1·3	29	17	6	1·04	?	*	*
	Armagh	54	30	49·8	35·8	42·5	− 2·2	30	17	7	0·79	+0·30	18	20
	Donaghadee	56	34	50·1	36·1	42·7	− 2·9	30	17	6	0·81	+0·36	*	*
	Edgeworthstown	52	32	50·0	36·0	42·7	− 0·7	30	17	5	0·85	+0·36	*	*
10. IRELAND, S.	Dublin	56	36	52·9	39·5	45·9	+ 0·1	38	7	7	0·89	+0·41	24	27
	Parsonstown	55	32	51·1	36·3	43·3	− 1·4	33	16	7	1·04	+0·54	18	20
	Kilkenny	56	30	51·0	36·7	43·6	− 1·0	33	15	7	0·91	+0·40	*	*
	Waterford	54	33	49·9	37·9	43·6	− 2·8	28	11	7	0·78	+0·10	*	*
	Roche's Point	56	37	51·4	39·7	45·3	− 1·3	33	6	6	1·65	+0·83	*	*
	Valencia	55	36	52·0	40·1	45·8	− 1·5	35	5	7	1·43	+0·49	13	14
	Killarney	58	32	52·3	39·6	45·7	− 0·1	36	7	7	1·83	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	41	52·7	42·6	47·4	− 0·7	38	0	6	0·65	+0·09	*	*
	Jersey (Noirmont)	58	40	52·3	42·9	47·4	+ 0·9	38	0	6	0·42	−0·08	39	43

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 15.] *New Series.* WEEK ENDING MONDAY, 12TH APRIL, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 60.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	32	47·1	35·7	41·1	1 below.	14	24	71	− 65	597	+147
	1. SCOTLAND, EAST	56	26	49·1	34·6	41·5	2 below.	20	28	128	− 67	680	+181
	2. ENGLAND, N.E.	55	30	48·2	36·2	41·9	3 below.	17	23	125	− 74	654	+209
	3. ENGLAND, EAST	56	29	51·4	35·8	43·2	3 below.	34	17	173	− 95	708	+241
	4. MIDLAND COUNTIES	59	27	50·2	34·6	42·0	4 below.	23	21	172	−121	679	+220
	5. ENGLAND, SOUTH	59	29	50·4	37·1	43·5	4 below.	31	14	172	−142	571	+221
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	53	29	47·6	35·6	41·3	4 below.	16	24	102	−123	546	+179
	7. ENGLAND, N.W.	54	30	47·5	36·2	41·6	4 below.	15	22	132	− 98	587	+231
	8. ENGLAND, S.W.	57	23	49·1	37·0	42·8	5 below.	27	14	179	−171	479	+261
	9. IRELAND, NORTH	55	28	48·5	34·2	41·0	5 below.	18	22	158*	−125	467	+143
	10. IRELAND, SOUTH	58	27	50·0	35·8	42·5	5 below.	30	17	226	−161	389	+166
	— CHANNEL ISLANDS	53	34	48·5	40·5	44·3	4 below.	22	4	245	−158	202	+110

	DISTRICTS. (See p. 60.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	2 more.	80	+11	11·2	+ 0·2	29	30	267	− 1	26	0
	1. SCOTLAND, EAST	3	2	3 less.	64	+11	6·6	− 0·2	42	44	279	−28	27	− 2
	2. ENGLAND, N.E.	4	4	1 less.	66	+14	7·5	+ 0·7	30	32	228	−22	22	− 1
	3. ENGLAND, EAST	5	8	4 more.	63	+11	6·2	− 0·3	43	47	271	−58	25	− 5
	4. MIDLAND COUNTIES	6	6	2 more.	61	+11	8·3	+ 0·7	32	35	237	−51	22	− 4
	5. ENGLAND, SOUTH	5	8	3 more.	58	+ 9	7·7	− 0·3	34	36	241	−63	22	− 6
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	12	2 less.	69	+ 8	14·0	+ 1·8	36	38	211	−61	20	− 5
	7. ENGLAND, N.W.	5	8	4 more.	66	+11	11·3	+ 1·9	31	33	220	−42	21	− 3
	8. ENGLAND, S.W.	5	10	4 more.	68	+10	12·6	− 0·3	44	47	259	−71	24	− 6
	9. IRELAND, NORTH	5	8	3 more.	70	+ 4	11·8	+ 1·8	31	33	195	−97	18	− 9
	10. IRELAND, SOUTH	5	12	5 more.	67	+ 4	13·6	+ 1·2	39	42	261 *	−71	24	− 7
	— CHANNEL ISLANDS	6	10	4 more.	80	+16	10·4	+ 0·3	45	48	346	−59	32	− 4

General Remarks.

Weather has been in an unsettled, changeable condition, heavy showers of rain or hail and in many places sleet or snow, alternating with clear skies and sunshine. During the latter part of the period thunder and lightning were experienced in various parts of England.

Temperature has been below the mean in all districts, the deficit ranging from 1° in "Scotland, N." and 2° in "Scotland, E." to 4° over central, southern, and north-western England, and in the west of Scotland, and to 5° in Ireland and the south-west of England. The maxima, which were recorded at most stations on the 12th, varied between 53° (in "Scotland, W." and the "Channel Islands") and 59° (in the "Midland Counties" and "England, S.") The minima were registered during the early morning either of the 11th or 12th, when the thermometer fell to 23° in "England, S.W.", to 26° in "Scotland, E." and to between 27° and 30° in nearly all other districts.

Rainfall has been rather less than the mean in the east and west of Scotland and the north-east of England, but more in all other localities.

Bright sunshine has not differed materially from that reported last week, the percentages of the possible amount of duration ranging from 30 in "Scotland, N." to 47 in "England, E." and "England, S.W." and 48 in the "Channel Islands".

Depressions observed.—The distribution of barometric pressure over our area has continued cyclonic. At the commencement of the period a depression was travelling in a north-easterly direction from our extreme northern coasts to Scandinavia, and the winds in our Islands were fresh or strong from the Westward. By the 7th another and much deeper disturbance had appeared suddenly off our western coasts, whence it moved slowly to the neighbourhood of the Shetlands, and in that position gradually filled up. In addition to these disturbances several subsidiaries passed across our Islands from the westward. Southerly to Westerly gales prevailed on nearly all our coasts on the 7th, and again at our southern stations on the 8th, but during the remainder of the week moderate to fresh Westerly winds were most general on our coasts.

* These values have been altered somewhat owing to errors in recent Returns from Londonderry and Valencia.

E 21899. 350.—4/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

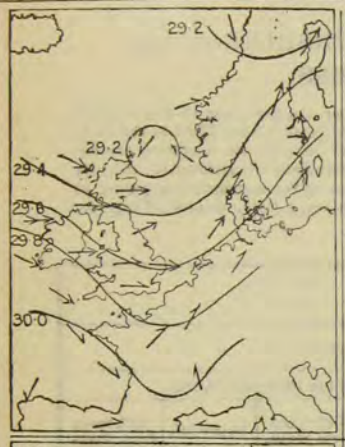
Weather

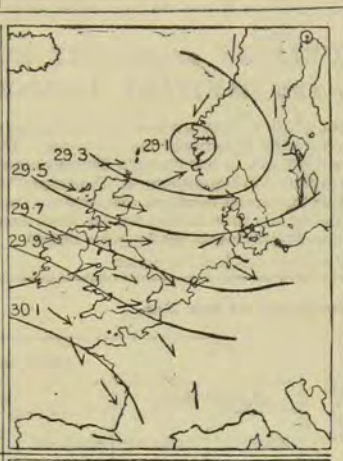
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, April 6.

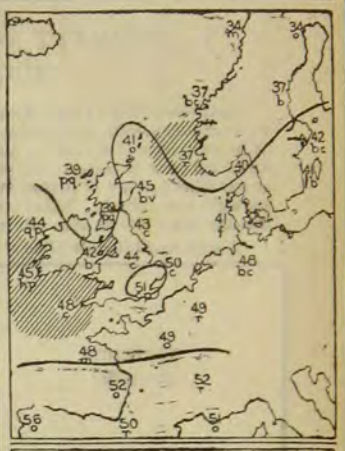
Weather rainy in the southern parts of Norway and France, and showery at several of our western and northern stations, but generally fine elsewhere.

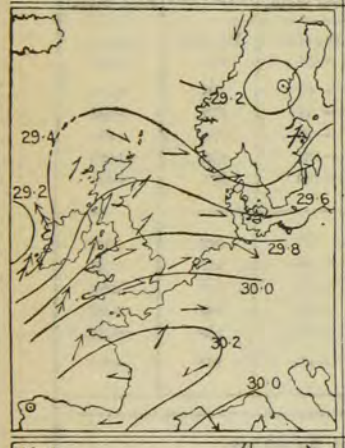
Temperature fallen a little in the west and north, but risen in the south-east; readings ranging from 51° in London to 39° at Stornoway, Nairn, and Ardrossan. Frost occurring at night in many parts of Great Britain.

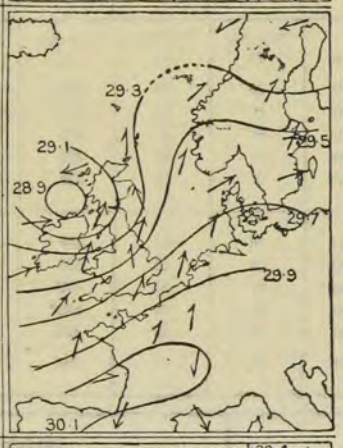
Wind fresh or strong from West in our Islands and the north of France, but South-Westerly in Denmark and South-Easterly in the south of Norway. Subsequently veering to West on eastern shores of North Sea.

Sea rough or rather so on many parts of our western coasts, but moderate to smooth elsewhere.

Barometer rising on our western coasts, but falling elsewhere. Pressure highest in Spain and the south of France, with a large but somewhat shallow depression lying near the Shetlands. Depression subsequently moving north-eastwards, and barometer rising in all parts of our Islands and France.







Wednesday, April 7.

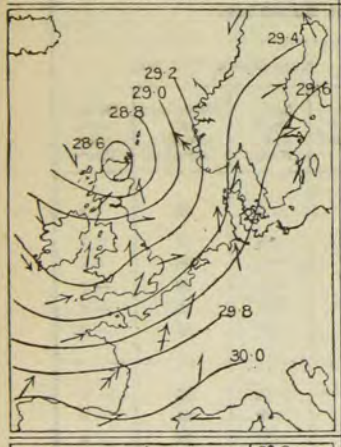
Weather dull and rainy in the west, but fair in nearly all other localities. Rain extending later to all parts of the Kingdom, and lightning seen at Valencia in evening.

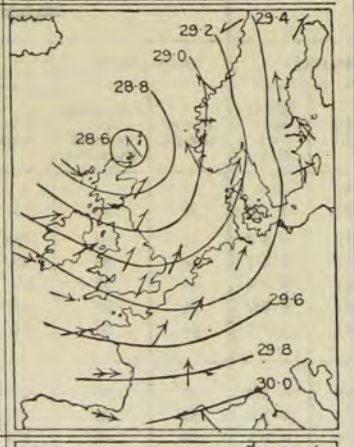
Temperature risen a little on the eastern shores of the North Sea, but fallen elsewhere; readings ranging from 51° at Valencia to 38° at Nairn and Malin Head.

Wind moderate South-Westerly in east and south, but strong Southerly in west, with gales in the west and south of Ireland. Southerly or South-Westerly gales prevailing later in all parts of our Islands.

Sea high at Valencia, and rough in west and south-west generally.

Barometer falling quickly on our western coasts and less decidedly in Sweden, but rising elsewhere. Depression of previous day now shown over Sweden, but new and deeper disturbance approaching Ireland. Latter system subsequently moving north-eastwards to the west of Scotland, and fall of barometer becoming general.





Thursday, April 8.

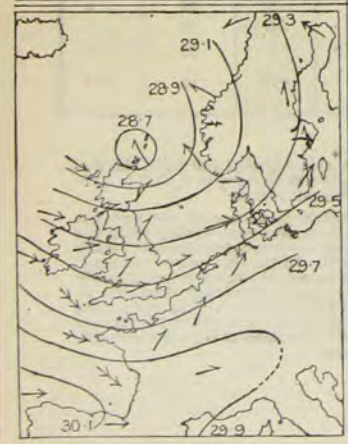
Weather fine in Sweden and the south of France, but squally and showery elsewhere, with sleet at Parsonstown. Thunder and lightning occurring at Scilly at night.

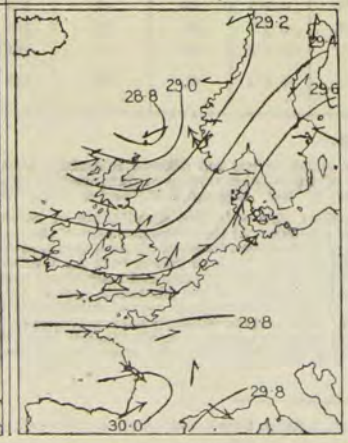
Temperature risen a little in most places; readings ranging from 49° in London and at Jersey to 37° at Parsonstown.

Wind moderate Westerly or North-Westerly in Ireland, but strong to a gale from South-West in France and the south of England and from South or South-East on the eastern shores of the North Sea. Wind moderating in south later.

Sea high at Prawle Point, and rough on our south and south-west coasts generally, as well as off the north of Scotland.

Barometer falling at all but the Swedish stations. Deep depression of previous day now lying over the north of Scotland, but subsidiary disturbance shown over the St. George's Channel. Rise taking place in west and north later.





Friday, April 9.

Weather changeable and showery generally, with sleet at Lyons. Hail or snow falling later in many parts of the Kingdom, with thunder and lightning at several of our central and southern stations.

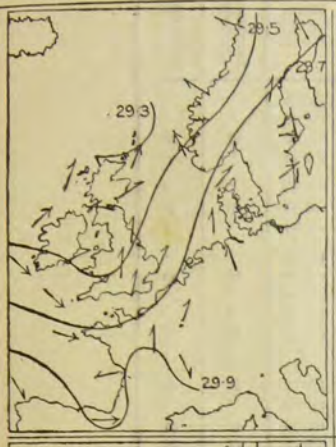
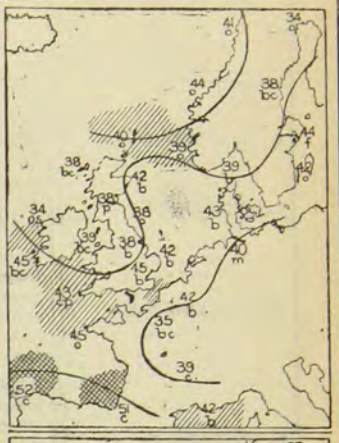
Temperature fallen a little in most places; readings ranging from 44° at Valencia, Scilly, Dungeness, and Cambridge, to 38° at Donaghadee. Frost occurring at night in many parts of our Islands.

Wind strong Westerly on our western and southern coasts, with gales at Scilly and Jersey, but moderate from South-West in the east, and moderate to strong from South-East or East in the Shetlands and west of Norway. Wind moderating in west and south later.

Sea high at Scilly and rough on several parts of our western and southern coasts.

Barometer rising at all but the Scandinavian and Danish stations. Deep depression of previous two days now lying off the Shetlands, and apparently filling up; but shallow subsidiary disturbances moving across Ireland and England.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, April 10.** *Weather* fair in most places, but showers of hail, rain, or sleet falling locally. Showers becoming more general later in day. *Temperature* fallen a little; readings ranging from 45° at Valencia, Dungeness, and in London to 35° at Parsonstown and 34° at Mullaghmore and Barrow-in-Furness. Frost occurring in many parts of the Kingdom at night. *Wind* moderate to strong from West over our western coasts and the Bay of Biscay, but moderate from South-West or South in the north and east. Subsequently veering to North in Ireland and the west of England. *Sea* rough at Scilly and rather rough in the Channel and Bay of Biscay. *Barometer* falling a little at our western, southern, and the French stations, but rising elsewhere. Depression in north entirely disappearing, but numerous shallow disturbances lying over our Islands and the Bay of Biscay. Those over our Islands subsequently uniting into one large depression and moving south-eastwards.	
		Sunday, April 11. *Weather* rainy at the Danish and some of the French stations, but fair in most other localities. Snow or cold rain falling however in some parts of England. Aurora seen in north of Scotland at night. *Temperature* risen a little on our western and northern coasts, but fallen in the south-east; readings ranging from 47° at Valencia to 33° at Loughborough. Frost occurring at night in many parts of Great Britain. *Wind* light Easterly on our north and east coasts, but chiefly Northerly elsewhere. North-westerly gales reported over Bay of Biscay. *Sea* rather rough at Valencia and Scilly, moderate to smooth elsewhere. *Barometer* rising briskly over our western and northern coasts, but falling over France, the Netherlands, and the south-east of England. Pressure now highest in the north of Sweden and relatively high to the westward of our Islands, but large area of low readings (with two or three distinct minima) extending from central Europe over France and the south-east of England.	
		Monday, April 12. *Weather* fair or fine at all but our extreme western stations, where dull with rain in some places. *Temperature* fallen over Ireland and the east of England, as well as in France, but risen elsewhere; readings rangings from 50° at Scilly to 39° at Loughborough and Parsonstown. Frost occurring over England at night. Thermometer on grass falling to 25° in London and at Oxford. *Wind* light or moderate Westerly or North-Westerly on our eastern coasts, and Northerly over the Channel and France, but Southerly in the west of Ireland. *Sea* moderate to smooth. *Barometer* rising generally. An anti-cyclone lying over the Gulf of Bothnia, and another over Ireland, England, and the Bay of Biscay, with a large shallow area of low pressure over the North Sea. No important change later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 57 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	48	33	46·0	35·4	40·5	− 1·2	11	25	5	0·60	+0·08	*	*
	Stornoway	50	32	46·6	34·6	40·3	− 2·7	13	27	6	0·88	+0·27	29	30
	Wick	55	32	48·7	37·0	42·6	+ 0·3	25	14	5	0·46	+0·10	*	*
1. SCOTLAND, E.	Nairn	53	26	48·3	32·0	39·8	− 3·8	18	37	4	0·12	−0·18	*	*
	Aberdeen	53	30	49·6	35·3	42·1	− 0·7	29	19	2	0·15	−0·36	42	44
	Leith	56	33	49·3	36·4	42·5	− 2·4	27	16	4	0·18	−0·20	*	*
2. ENGLAND, N.E.	Alnwick Castle	49	30	46·6	35·6	40·8	− 2·7	13	24	4	0·56	+0·03	*	*
	Durham	53	31	48·4	34·5	41·1	− 2·6	18	28	4	0·22	−0·29	26	28
	Shields	51	34	48·0	36·4	41·8	− 2·5	17	21	3	0·12	−0·32	*	*
	Scarborough ℳ	51	32	48·0	37·2	42·3	− 2·0	22	13	5	0·47	+0·03	*	*
	York	55	32	50·3	36·0	42·8	− 2·8	31	17	5	0·65	+0·23	33	35
	Spurn Head	52	34	47·7	37·7	42·5	− 2·5	22	12	5	0·48	?	*	*
3. ENGLAND, E.	Hillington ℳ	55	30	51·4	34·5	42·5	− 2·4	35	21	5	1·18	+0·77	41	44
	Yarmouth	54	34	49·0	37·7	43·1	− 2·3	26	12	5	0·74	+0·33	*	*
	Geldeston	55	32	51·7	36·7	43·8	− 2·7	35	15	4	0·84	+0·49	47	51
	Cambridge	56	29	53·0	35·0	43·8	− 2·8	42	20	5	0·49	+0·10	42	45
	Rothamsted	55	31	50·5	34·4	42·1	− 4·1	33	21	6	0·97	+0·47	*	*
	Ingatestone	56	31	52·6	36·3	44·1	− 2·6	39	16	4	0·68	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	55	30	50·6	35·1	42·5	− 2·9	32	19	4	0·48	+0·08	32	34
	Loughborough	55	29	51·0	35·6	42·9	− 3·3	33	18	6	0·49	+0·09	*	*
	Leicester	55	30	51·1	34·2	42·2	− 3·5	34	22	6	0·74	+0·32	27	29
	Cheadle ℳ	53	29	48·1	32·7	40·0	− 4·3	17	34	6	0·47	−0·05	*	*
	Churchstoke ℳ	55	27	49·1	32·3	40·3	− 5·6	20	36	6	0·79	+0·39	34	37
	Hereford ℳ	59	28	51·7	35·2	43·1	− 3·7	36	19	6	0·87	+0·47	*	*
	Cirencester	55	29	49·4	34·9	41·8	− 4·1	21	28	6	0·53	+0·02	35	38
	Oxford	55	30	50·3	36·4	43·0	− 4·3	31	16	4	0·69	+0·28	33	35
5. ENGLAND, S.	London†	56	34	52·4	38·0	44·9	− 2·9	37	11	5	0·50	+0·08	28	30
	Strathfield Turgiss ℳ	57	29	52·3	35·8	43·7	− 3·0	38	17	5	0·71	+0·28	*	*
	Dungeness	58	29	50·4	35·9	42·8	− 5·0	31	17	3	0·95	+0·53	*	*
	Hastings (St. Leonard's)	54	33	49·5	37·7	43·3	− 3·8	27	12	4	0·90	+0·42	31	33
	Southampton	59	32	51·9	37·0	44·1	− 3·2	36	14	5	0·88	+0·40	42	45
	Hurst Castle	53	32	48·4	39·0	43·5	− 4·3	23	8	5	0·73	+0·30	*	*
	Stowell ℳ	53	32	48·0	36·3	41·9	− 4·2	17	22	5	0·81	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	53	29	46·9	33·7	40·0	− 4·3	14	30	5	3·65	+2·70	*	*
	Glasgow	53	33	47·3	35·5	41·1	− 3·7	15	24	4	0·30	−0·23	32	34
	Ardrossan	52	32	48·0	36·7	42·1	− 2·7	23	15	5	0·31	−0·22	*	*
	Douglas (Isle of Man)	52	33	48·0	36·6	42·0	− 4·1	17	15	5	0·50	−0·06	39	42
7. ENGLAND, N.W.	Newton Reigny (Penrith)	52	32	46·1	33·5	39·5	− 4·6	11	31	5	1·01	+0·48	30	32
	Barrow-in-Furness	54	33	47·6	37·3	42·2	− 2·4	21	13	6	0·85	+0·39	*	*
	Stonyhurst	51	32	46·4	34·0	39·9	− 5·5	12	29	6	1·51	+0·94	28	30
	Blackpool ℳ	54	3*	47·0	37·3	41·9	− 4·9	14	18	5	1·00	+0·60	36	38
	Manchester	52	30	48·1	34·1	40·8	− 4·1	17	30	4	0·73	+0·24	*	*
	Liverpool Obsr (Bidston)	52	34	48·7	37·4	42·8	− 3·5	25	13	6	0·41	+0·05	*	*
	Llandudno ℳ	54	35	49·0	37·1	42·8	− 4·7	26	14	4	0·47	+0·07	29	31
	Holyhead	50	37	47·0	38·6	42·6	− 4·8	18	10	3	0·70	+0·28	*	*
8. ENGLAND, S.W.	Llandovery	56	23	49·9	31·6	40·3	− 6·2	22	39	7	1·59	+0·93	*	*
	Pembroke	47	34	45·7	39·6	42·5	− 5·3	14	7	4	0·76	+0·26	43	46
	Arlington (N. Devon)	53	29	47·9	34·7	41·0	− 5·8	17	28	6	1·30	+0·59	*	*
	Cullompton ℳ	57	29	51·1	36·7	43·6	− 3·7	33	15	4	0·97	+0·36	39	42
	Falmouth	51	36	48·6	38·5	43·3	− 4·6	24	10	5	0·90	+0·15	48	52
	Plymouth	56	35	51·7	40·1	45·6	− 2·9	33	5	4	0·91	+0·31	44	47
	Prawle Point	52	34	48·6	38·0	43·1	− 4·4	25	11	4	0·76	?	*	*
9. IRELAND, N.	Malin Head	50	33	47·6	35·1	41·1	− 3·7	16	26	5	0·70	?	*	*
	Londonderry	53	31	49·5	34·4	41·6	− 4·1	21	29	4	0·93	+0·37	*	*
	Mullaghmore	52	29	48·4	37·0	42·4	− 4·4	24	14	6	0·84	+0·35	*	*
	Belmullet	51	35	46·6	37·4	41·8	− 5·5	13	18	7	1·29	?	*	*
	Markree Castle	52	28	48·5	31·8	39·8	− 6·1	18	38	6	0·73	+0·16	31	33
	Brookeborough	52	28	48·7	32·5	40·2	− 5·3	19	35	4	0·84	?	*	*
	Armagh	54	30	49·5	32·5	40·6	− 5·3	21	36	4	0·42	−0·08	31	33
	Donaghadee	52	31	48·6	35·0	41·5	− 5·0	18	27	4	0·36	−0·09	*	*
	Edgeworthstown	55	28	49·4	31·7	40·1	− 5·2	21	38	3	0·85	+0·36	*	*
10. IRELAND, S.	Dublin	58	32	49·2	35·4	42·0	− 5·0	20	18	4	0·37	−0·11	40	43
	Parsonstown	58	29	49·3	33·3	40·9	− 5·4	20	33	5	1·01	?	38	41
	Kilkenny	58	27	50·7	33·1	41·5	− 4·4	24	34	5	0·81	+0·29	*	*
	Waterford	53	29	49·2	34·7	41·6	− 5·8	20	28	5	1·03	+0·35	*	*
	Roche's Point	54	35	51·0	38·3	44·4	− 3·2	32	10	6	1·23	+0·43	*	*
	Valencia	55	36	50·7	39·4	44·8	− 3·3	31	7	7	1·95	+1·00	38	41
	Killarney	56	30	49·7	36·1	42·6	− 4·4	29	17	6	2·01	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	36	49·7	40·9	45·1	− 3·7	26	3	6	0·84	+0·27	*	*
	Jersey (Noirmont)	50	34	47·3	40·1	43·5	− 4·4	18	5	5	1·07	+0·59	45	48

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 16.] *New Series.* WEEK ENDING MONDAY, 19TH APRIL, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 64.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	34	48·6	38·3	43·2	0 (average).	24	10	95	− 64	607	+143
	1. SCOTLAND, EAST	58	34	48·8	39·0	43·6	1 below.	24	8	152	− 74	688	+177
	2. ENGLAND, N.E.	58	36	47·5	38·8	43·0	3 below.	20	9	145	− 84	663	+206
	3. ENGLAND, EAST	63	32	50·5	38·1	44·0	4 below.	30	11	203	−102	719	+239
	4. MIDLAND COUNTIES	63	33	51·7	38·6	44·8	3 below.	34	10	206	−126	689	+216
	5. ENGLAND, SOUTH	65	28	52·2	31·8	45·2	4 below.	36	9	208	−149	580	+222
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	58	32	51·5	39·8	45·3	1 below.	32	6	134	−126	552	+176
	7. ENGLAND, N.W.	59	35	50·7	40·6	45·4	2 below.	30	4	162	−103	591	+224
	8. ENGLAND, S.W.	60	33	52·1	39·8	45·6	3 below.	34	6	213	−178	485	+260
	9. IRELAND, NORTH	57	30	50·9	40·4	45·4	2 below.	31	4	189	−133	471	+139
	10. IRELAND, SOUTH	61	28	53·0	39·7	46·0	2 below.	38	6	264	−166	395	+167
	— CHANNEL ISLANDS	56	37	49·5	42·1	45·6	4 below.	25	0	270	−176	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 64.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	1	3 less.	84	+11	11·3	− 0·1	37	37	304	+ 3	27	+ 1
	1. SCOTLAND, EAST	6	3	1 less.	70	+14	6·9	− 0·3	16	16	295	− 45	26	− 4
	2. ENGLAND, N.E.	5	6	1 more.	71	+16	8·1	+ 0·8	18	18	246	− 28	21	− 2
	3. ENGLAND, EAST	5	3	2 less.	68	+11	6·5	− 0·4	19	20	290	− 73	25	− 6
	4. MIDLAND COUNTIES	5	3	1 less.	66	+12	8·6	+ 0·5	16	16	253	− 67	22	− 5
	5. ENGLAND, SOUTH	5	3	1 less.	63	+10	8·0	− 0·4	22	23	263	− 73	22	− 6
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	2	2	4 less.	71	+ 6	14·2	+ 1·5	34	35	245	− 58	21	− 5
	7. ENGLAND, N.W.	3	3	2 less.	69	+11	11·6	+ 1·7	22	23	242	− 52	21	− 4
	8. ENGLAND, S.W.	3	3	4 less.	71	+10	12·9	− 0·7	20	21	279	− 91	24	− 7
	9. IRELAND, NORTH	2	2	3 less.	72	+ 2	12·0	+ 1·4	27	27	222	−106	20	− 8
	10. IRELAND, SOUTH	2	1	6 less.	69	+ 3	13·7	+ 0·7	31	32	292	− 75	25	− 6
	— CHANNEL ISLANDS	4	6	1 more.	84	+16	11·0	+ 0·4	24	25	370	− 78	31	− 6

General Remarks.

Weather has been cloudy or dull generally, with frequent cold showers over all the eastern parts of the Kingdom, but drier and less cloudy conditions in the north-west and extreme north.

Temperature has about equalled the mean in "Scotland, N.", but in the other districts it has varied between 1° and 4° below. The highest of the daily maxima, which were recorded on the 13th or 14th in Ireland and Scotland, and on the 19th over England, ranged from 65° in "England, S." to 56° in the "Channel Islands" and to 52° in "Scotland, N." During the greater part of the week the maxima at most of the English and Scotch stations were below 50°. The maximum in London (65°) was the highest recorded in the Metropolis during the present season. The minima, which were registered on irregular dates, varied between 28° in "England, S." and "Ireland, S.", and 37° in the "Channel Islands".

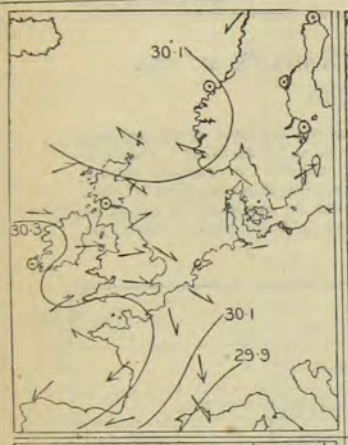
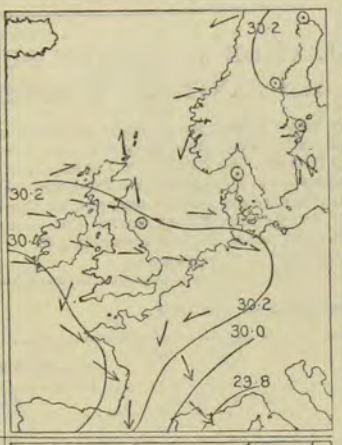
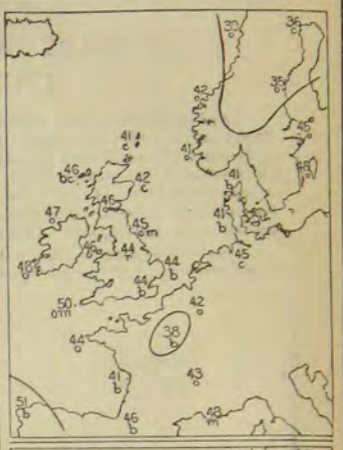
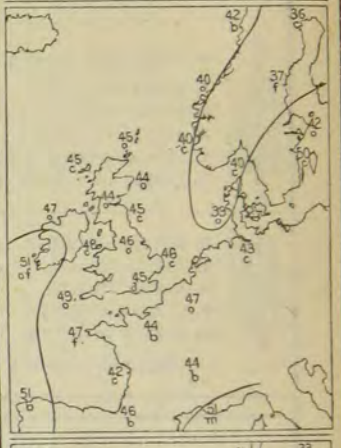
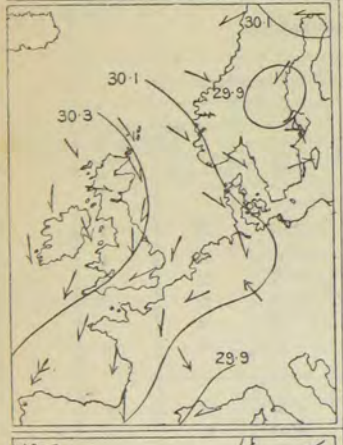
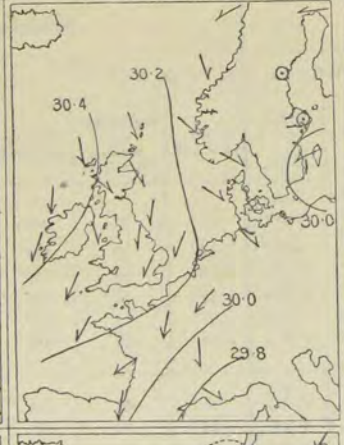
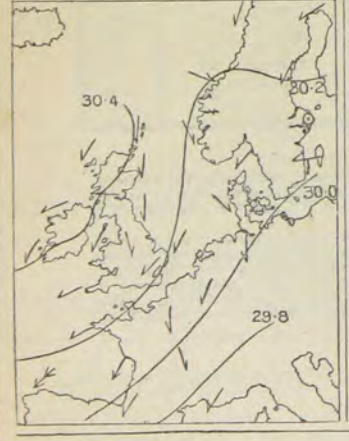
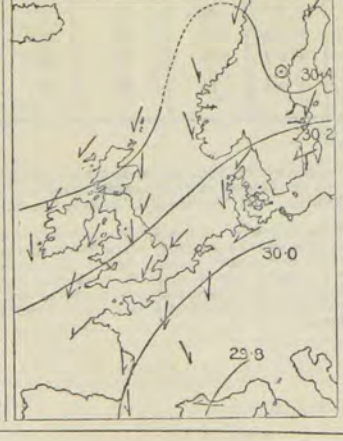
Rainfall has been slightly more than the mean in the "Channel Islands" and "England, N.E.", but less in all other localities. In the south of Ireland and the north and west of Scotland the fall has been scarcely appreciable.

Bright sunshine has been less prevalent than it was last week, excepting over northern Scotland. The percentages of the possible amount of duration ranged from 16 in the "Midland Counties" and "Scotland, E." to 35 in "Scotland, W." and 37 in "Scotland, N."

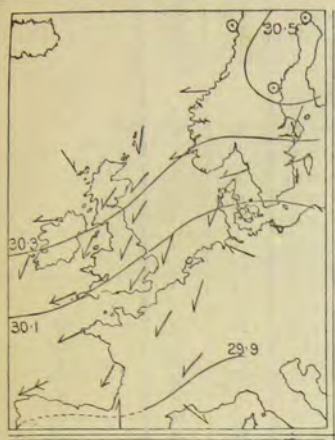
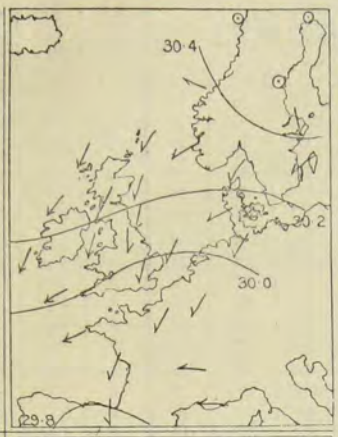
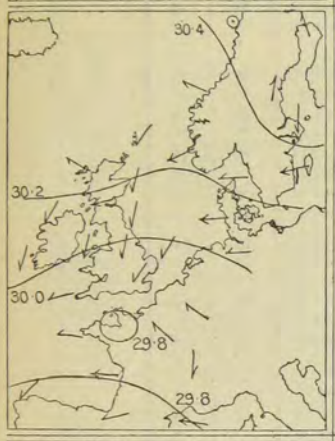
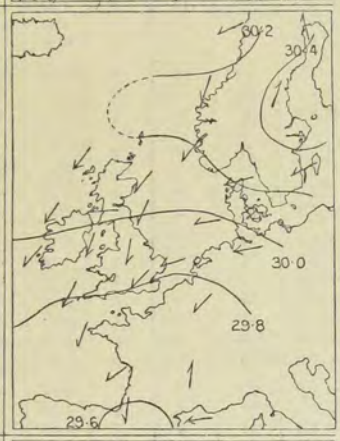
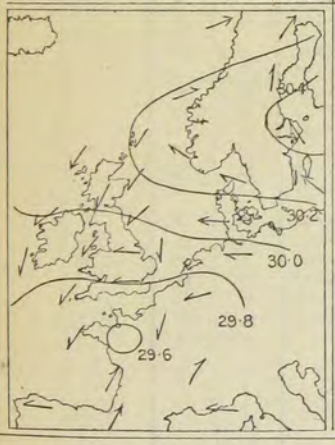
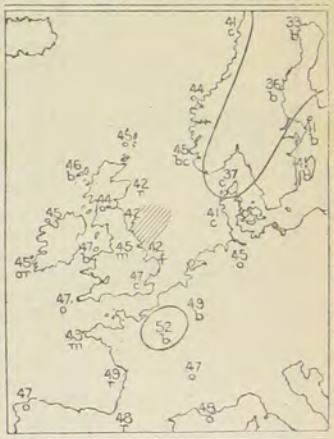
Depressions observed.—The distribution of pressure during this period was somewhat irregular, one area of high readings being shown to the south-westward of our Islands, and another over Scandinavia and the Baltic. No depressions appeared over the United Kingdom, but towards the close of the week (the high pressure areas having moved further to the northward) some shallow disturbances lay over the north of France. The winds experienced over our Islands were light or moderate from between North-West and North-East.

E 21998. 350.—4/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, April 13.** *Weather* fair generally, but very cloudy in places, with rain in the north of England. Rain falling later in many parts of the Kingdom. Lunar halo seen at Shields in evening. *Temperature* risen in most places; readings ranging from 50° at Scilly to 41° in the Shetlands. *Wind* light from between South-West and North-West over the United Kingdom, but fresh from North in France, and moderate from East in the south of Norway. *Sea* slight or smooth. *Barometer* rising generally. Anticyclones lying over the Gulf of Bothnia and the Bay of Biscay, with a depression over the Gulf of Genoa and a large area of relatively low pressure to the northward of our Islands. Rise continuing all day.	
		Wednesday, April 14. *Weather* cloudy or overcast in most places, with rain at several of the English stations. Showers falling in north and east later. *Temperature* little changed; readings ranging from 52° at Parsonstown to 44° in many parts of Great Britain. *Wind* South-Westerly or Westerly over the north of England, but North-Westerly elsewhere; light or moderate in force in most places. Subsequently veering to the Northward at our northern stations. *Sea* slight or smooth. *Barometer* falling in Sweden and Denmark, but rising elsewhere. Anticyclone still lying over Bay of Biscay, with well-marked but shallow depressions over the Baltic and Gulf of Genoa. Slight fall taking place in France and the south of England later.	
		**Thursday, April 15.** *Weather* fine and bright on our western coasts, but cloudy elsewhere, with showers in the north of Scotland, and rain at Biarritz. Showers falling in east and south-east of England later. *Temperature* fallen a few degrees in most parts of the Kingdom; readings ranging from 52° at Valencia and Prawle Point, to 40° at York, Loughborough, and Spurn Head. *Wind* light or moderate from North-West on our northern coasts, and also on the eastern shores of the North Sea, but varying between North and North-East elsewhere. *Sea* moderate at the mouth of the Channel, but slight or smooth in all other localities. *Barometer* rising in our Islands, but falling at most of the Continental stations. Anticyclone of previous day now lying over our western coasts, with shallow depressions over Sweden and the Gulf of Genoa. Slight fall taking place later at our western and south-western stations.	
		**Friday, April 16.** *Weather* cloudy in most places, with rain at several of our eastern stations, and fog at Hernösand, Wisby, and Fanö. Sky clearing in west later. *Temperature* fallen a little; readings ranging from 48° at Valencia and Scilly to 41° at Loughborough and Oxford. *Wind* North-Westerly in Norway, but Northerly or North-Easterly elsewhere; light or moderate generally, but strong in the west of France. Subsequently freshening on our eastern and southern coasts. *Sea* rather rough at Valencia, but slight or smooth on all other parts of our coasts. *Barometer* rising in Scotland and Scandinavia, but falling slowly elsewhere. Large anticyclone lying to the westward and north-westward of our Islands, with lowest pressures over the Gulf of Genoa. Anticyclone subsequently extending north-eastwards to the north of Scandinavia, but mercury continuing to fall at all our more southern stations.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, April 17.** *Weather* fine in Norway, Denmark, and the west of our Islands, but cloudy elsewhere, with showers at several of our eastern and southern stations. Sky clearing in north later. *Temperature* risen a little on the eastern shores of the North Sea, but fallen in most other localities; readings ranging from 46° at Belmullet to 40° at Loughborough, Oxford, and in London. Frost occurring over central Ireland at night. *Wind* chiefly North-Easterly; light or moderate in force generally, but fresh or strong at some of the more exposed stations. *Sea* moderate in the north-east and east, but slight or smooth elsewhere. *Barometer* falling slowly at all but the Scandinavian stations. Pressure now highest over the north of Sweden, but high to the northward and north-westward of our Islands, with relatively low readings over Spain. No important change later.	
		**Sunday, April 18.** *Weather* fair at our western and many of the Continental stations, but cloudy elsewhere, with rain over the eastern parts of Great Britain. Rain falling late in most places, and thunder heard at Cambridge and Jersey. *Temperature* risen in France and the south of our Islands, but fallen elsewhere; readings over the United Kingdom ranging between 46° and 42°. *Wind* Southerly in the north of Sweden, but Easterly or North-Easterly in all other localities; light or moderate in force generally. *Sea* moderate to smooth. *Barometer* falling generally, most in the west and south. Central portion of anticyclone lying over the Gulf of Bothnia, with lowest pressures in Spain and the south of France, and small shallow depression over Brittany. Fall continuing all day, but no important change taking place in general distribution of pressure.	
		**Monday, April 19.** *Weather* fine in Sweden and the Netherlands, but cloudy or overcast elsewhere, with rain over the Channel and the Bay of Biscay, as well as in the east of Scotland. Thunder heard later at Pembroke and Jersey. *Temperature* risen a little over our Islands and France; readings ranging from 49° at Dungeness to 42° at Aberdeen, Leith, Shields, and Yarmouth. Subsequently rising to 60° at Oxford, 63° at Loughborough and Cambridge, and 65° in London. *Wind* South-westerly in the north of Scandinavia and south-west of France, but Easterly or North-Easterly elsewhere; light or moderate in force in most places. *Sea* rather rough at Shields, but moderate to smooth elsewhere. *Barometer* falling at all but the Norwegian and Danish stations. Distribution of pressure very similar to that of previous day, but central portion of anticyclone lying a little further south. Slight rise taking place later in many parts of our Islands and France.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟫⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 61 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	49	36	43·3	38·3	43·1	+ 0·3	23	10	2	0·02	−0·47	*	*
	Stornoway	52	36	49·7	39·1	44·2	− 0·1	28	8	4	0·12	−0·46	37	37
	Wick	51	34	47·7	37·4	42·3	− 1·2	21	13	5	0·29	−0·07	*	*
1. SCOTLAND, E.	Nairn	57	36	49·3	39·0	43·9	− 0·9	26	8	6	0·11	−0·18	*	*
	Aberdeen	54	34	47·6	38·3	42·7	− 1·6	20	10	7	0·51	−0·01	16	16
	Leith	58	38	49·4	39·7	44·3	− 1·7	26	6	4	0·23	−0·15	*	*
2. ENGLAND N.E.	Alnwick Castle	51	37	45·0	39·3	42·0	− 3·0	8	8	5	0·69	+0·14	*	*
	Durham	53	33	48·0	37·5	42·5	− 2·7	22	13	6	0·63	+0·11	15	15
	Shields	52	37	46·7	39·3	42·8	− 2·7	17	8	3	0·52	+0·07	*	*
	Scarborough ⚓	51	37	45·8	38·9	42·2	− 3·6	14	9	3	1·00	+0·55	*	*
	York	53	36	52·0	38·6	45 0	− 2·1	35	10	6	0·37	−0·06	21	21
	Spurn Head	58	38	47·6	39·4	43·2	− 3 2	19	7	4	0·19	?	*	*
3. ENGLAND, E.	Hillington ⚓	54	32	49·2	38·1	43·4	− 4·0	26	11	5	0·22	−0·21	18	19
	Yarmouth	52	36	47·4	38·4	42·7	− 5·1	20	10	5	0·15	−0·27	*	*
	Geldeston	58	34	50·0	37·8	43·6	− 4·5	29	12	5	0·28	−0·07	19	20
	Cambridge	63	33	52·9	38·3	45·3	− 3·3	39	10	5	0·22	−0·18	21	22
	Rothamsted	61	35	50 8	38·3	44·3	− 3·4	32	10	7	0·47	−0·05	*	*
	Ingatestone	62	35	52·5	37·9	44·9	− 3·8	28	11	4	0·16	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	59	35	51·7	38·0	44·5	− 3·0	34	11	6	0·52	+0·11	11	11
	Loughborough	63	34	52·0	38·6	45·0	− 2·6	35	10	6	0·29	−0·13	*	*
	Leicester	62	36	51·9	38·9	45·1	− 2·5	35	9	7	0·52	+0·07	13	13
	Cheadle ⚓	58	35	51·0	37·9	44·1	− 1·6	32	11	2	0·07	−0·45	*	*
	Churchstoke ⚓	58	36	51·6	37·7	44·3	− 3·3	34	12	4	0·15	−0·25	18	19
	Hereford ⚓	59	37	53·0	39·4	45·9	− 2·4	38	7	4	0·50	+0·08	*	*
	Cirencester	58	33	51·0	38·4	44·4	− 3·0	32	10	4	0·25	−0·28	20	21
	Oxford	60	37	51·3	40·1	45·4	− 3·2	32	5	5	0·41	−0·01	17	18
5. ENGLAND, S.	London†	65	35	52·9	39·7	46·0	− 3·5	38	6	5	0·17	−0·25	20	21
	Strathfield Turgiss ⚓	63	28	?53·1	38·4	?45·4	?− 2·5	?39	?10	5	0·36	−0·09	*	*
	Dungeness	56	29	52·0	37 3	44·3	− 5·0	36	13	4	0 13	−0·29	*	*
	Hastings (St. Leonard's)	61	37	51·9	40·1	45·7	− 2·9	34	5	6	0·25	−0·23	23	24
	Southampton	63	33	53·9	39·2	46·2	− 2·5	41	8	4	0 36	−0·12	23	24
	Hurst Castle	55	33	50·1	39·1	44·4	− 4·5	29	8	6	0·25	−0·19	*	*
	Stowell ⚓	61	33	51·4	37·6	44·2	− 3·9	34	12	5	0·74	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	54	32	51·8	38·8	45·0	− 0·8	34	9	1	0·03	−0·83	*	*
	Glasgow	56	37	50·2	39·3	44·5	− 1·3	29	8	2	0 03	−0·50	25	26
	Ardrossan	53	37	51·0	40·0	45·2	− 0·5	31	6	1	0·07	−0·45	*	*
	Douglas (Isle of Man)	58	38	52·8	40·9	46·6	− 0·4	37	3	3	0·45	−0·10	42	43
7. ENGLAND, N.W.	Newton Reigny (Penrith)	55	35	50·2	37·9	43·8	− 1·7	30	11	4	0·37	−0·06	23	23
	Barrow-in-Furness	59	37	52·9	41·3	46·8	− 1·1	37	2	3	0·42	−0·03	*	*
	Stonyhurst	56	36	50·3	39·3	44·5	− 2·1	29	8	3	0·16	−0·40	21	21
	Blackpool ⚓	58	36	51·8	41·1	46·2	− 1·8	33	3	3	0·25	−0·15	20	20
	Manchester	58	37	50·7	40·0	45·1	− 1·0	30	6	3	0·11	−0·37	*	*
	Liverpool Obsy (Bidston)	58	38	51·3	41·4	46·1	− 1·5	31	2	5	0·42	−0·14	*	*
	Llandudno ⚓	52	40	49·4	41·5	45·3	− 3·5	25	1	3	0·32	−0·17	25	26
	Holyhead	53	41	48·7	42·4	45·4	− 3·3	24	0	2	0·24	−0·18	*	*
8. ENGLAND, S.W.	Llandovery	60	35	54·0	37·7	45·5	− 3·1	43	12	3	0·14	−0·51	*	*
	Pembroke	56	39	50·7	41·6	45·9	− 3·0	29	1	3	0·26	−0·22	34	35
	Arlington (N. Devon)	57	37	51·1	38·9	44·7	− 3·3	32	9	3	0·18	−0·52	*	*
	Cullompton ⚓	58	33	52·3	38·0	44·8	− 4·0	36	11	3	0·31	−0·31	17	18
	Falmouth	53	38	50·1	40·5	45·1	− 4·0	28	4	3	0·57	−0·18	14	15
	Plymouth	58	38	53·6	42·1	47·6	− 1·2	39	0	3	0·13	−0·47	13	14
	Prawle Point	59	37	52·7	39·7	45·9	− 2·7	37	6	3	0·32	?	*	*
9. IRELAND, N.	Malin Head	50	39	48·9	41·7	45·1	− 1·2	23	1	2	0·35	?	*	*
	Londonderry	55	34	52·2	39·9	45·7	− 1·1	35	6	3	0·41	−0·13	*	*
	Mullaghmore	54	38	50·3	43·1	46·5	− 1·3	32	0	1	0·33	−0·13	*	*
	Belmullet	52	41	50·0	43·4	46·5	− 1·6	32	0	1	0·04	?	*	*
	Markree Castle	54	30	51·2	38·5	44·6	− 2·8	33	10	2	0·15	−0·42	29	30
	Brookeborough	57	35	51·4	38·9	44·9	− 2·2	33	9	1	0·22	?	*	*
	Armagh	57	35	52·3	38·9	45·3	− 1·8	36	9	2	0·20	−0·32	24	24
	Donaghadee	51	39	50·1	40·9	45·3	− 2·2	28	3	4	0·39	−0·08	*	*
	Edgeworthstown	55	34	51·3	38·4	44·5	− 3·0	33	10	1	0·10	−0·47	*	*
10. IRELAND, S.	Dublin	57	37	51·8	41·5	46·4	− 0·9	33	1	4	0·14	−0·34	32	33
	Parsonstown	59	31	52·3	36·4	44·0	− 3·8	38	16	1	0·02	−0·48	36	37
	Kilkenny	59	34	53·4	39·4	46·1	− 1·5	40	7	0	—	−0·52	*	*
	Waterford	61	36	54·8	38·9	46·0	− 2·6	41	9	1	0·04	−0·63	*	*
	Roche's Point	59	36	53·9	41·0	47·1	− 1·5	40	3	2	0·05	−0·75	*	*
	Valencia	56	36	53·7	42·4	47·8	− 1·4	41	0	3	0·07	−0·87	24	25
	Killarney	56	28	52·2	38·1	44·8	− 3·6	36	11	1	0·08	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	39	49·3	43·1	46·1	− 2·7	29	0	4	0·67	+0·10	*	*
	Jersey (Noirmont)	56	37	49·6	41·0	45·1	− 4·2	26	3	4	0·60	+0·12	24	25

Stations marked ⚓ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 17.] *New Series.* WEEK ENDING MONDAY, 26TH APRIL, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1861-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

DISTRICTS (See p. 68.)	Temperature of the Air.											
	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
			Averages of				For the Week.		Since December 29, 1885.			
	Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	55	28	50·4	36·6	43·1	1 below.	30	15	125	− 58	622	+145
1. SCOTLAND, EAST	60	24	51·3	34·9	42·7	3 below.	35	20	187	− 71	708	+188
2. ENGLAND, N.E.	60	35	46·8	33·5	42·4	4 below.	18	10	163	−100	673	+209
3. ENGLAND, EAST	68	33	53·1	39·4	45·9	3 below.	33	7	241	−119	726	+238
4. MIDLAND COUNTIES	71	32	57·4	39·5	48·1	1 below.	53	7	259	−119	696	+214
5. ENGLAND, SOUTH	71	37	58·3	43·1	50·4	0 (average).	59	0	237	−137	580	+216
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	62	31	53·3	39·3	46·0	1 below.	39	8	173	−122	560	+177
7. ENGLAND, N.W.	65	34	55·2	40·8	47·6	1 below.	44	3	206	− 97	594	+221
8. ENGLAND, S.W.	70	26	57·4	42·5	49·6	0 (average)	53	0	266	−171	485	+257
9. IRELAND, NORTH	70	29	56·3	39·7	47·6	1 below.	49	6	238	−124	477	+140
10. IRELAND, SOUTH	67	33	56·3	42·6	49·2	0 (average).	50	0	314	−163	395	+163
— CHANNEL ISLANDS	68	41	55·7	45·8	50·5	0 (average).	60	0	330	−166	202	+109

DISTRICTS. (See p. 68.)	Rainfall.							Bright Sunshine.					
	For the Week.			Since December 29, 1885.				For the Week.		Since December 29, 1885.			
	Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	2	6	2 more.	86	+10	11·9	+ 0·5	67	64	371	+ 39	30	+ 3
1. SCOTLAND, EAST	1	1	3 less.	71	+11	7·0	− 0·2	53	51	348	− 32	28	− 2
2. ENGLAND, N.E.	3	1	4 less.	74	+15	8·2	+ 0·9	30	30	276	− 26	22	− 2
3. ENGLAND, EAST	1	less than ½	4 less.	69	+ 8	6·5	− 0·4	36	36	326	− 73	26	− 5
4. MIDLAND COUNTIES	2	1	4 less.	68	+10	8·7	+ 0·6	37	37	290	− 62	23	− 4
5. ENGLAND, SOUTH	1	1	4 less.	64	+ 7	8·1	− 0·3	50	51	313	− 57	25	− 4
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	2	1	4 less.	73	+ 5	14·3	+ 1·6	46	45	291	− 39	23	− 3
7. ENGLAND, N.W.	2	2	3 less.	71	+ 9	11·8	+ 1·9	46	46	288	− 33	23	− 2
8. ENGLAND, S.W.	3	5	2 less.	74	+ 8	13·4	− 0·2	46	46	325	− 86	26	− 6
9. IRELAND, NORTH	2	1	4 less.	74	0	12·1	+ 1·5	49	48	271	− 86	22	− 6
10. IRELAND, SOUTH	2	3	3 less.	71	0	14·0	+ 1·0	44	44	336	− 64	27	− 4
— CHANNEL ISLANDS	2	1	5 less.	86	+13	11·1	+ 0·5	57	58	427	− 70	33	− 5

General Remarks.

Weather has been generally fair and dry, but showers fell on our east coast during the early part of the week, and in the west towards the close of the period. Thunderstorms were experienced at several of the English stations on the 24th.

Temperature has been about equal to the mean over the extreme southern parts of the Kingdom, but below the normal elsewhere, especially over the east of Great Britain, where the deficit has amounted to 3 or 4 degrees. The highest readings were registered over the central and southern parts of England on the 24th and in Ireland on the 25th or 26th, when the thermometer reached 70° in "England, S.W." and "Ireland, N.", and 71° in the "Midland Counties" and "England, S."; on the east coast of England, however, temperature remained below 50° throughout the week. The lowest minima which were recorded on various dates in the different districts ranged from 24° in "Scotland, E." and 26° in "England, S.W." (at Llandovery), to 37° in "England, S." and to 41° in the "Channel Islands".

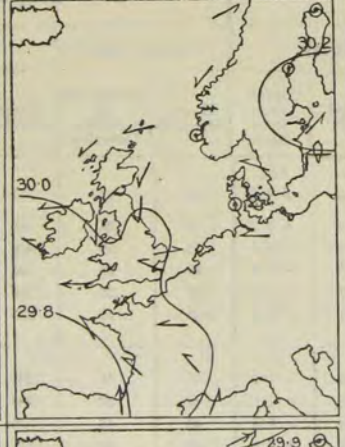
Rainfall has been a little more than the mean in "Scotland, N.", but less in all other districts. In some localities in "England, S." and "England, E." there has been an entire absence of rain.

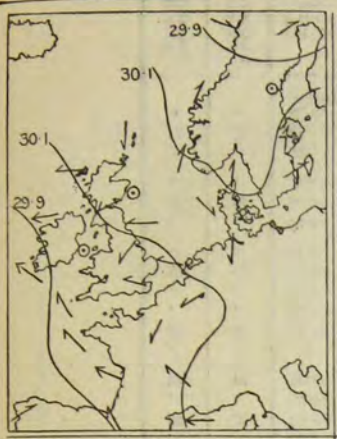
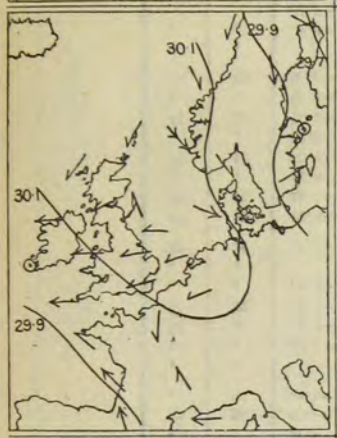
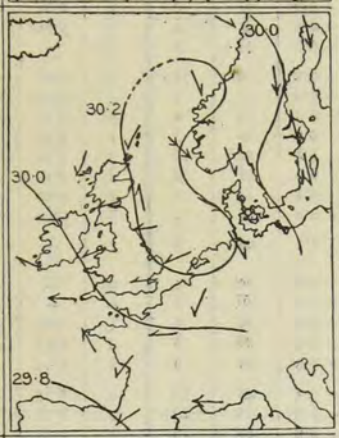
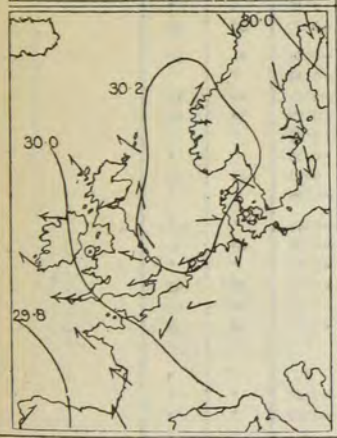
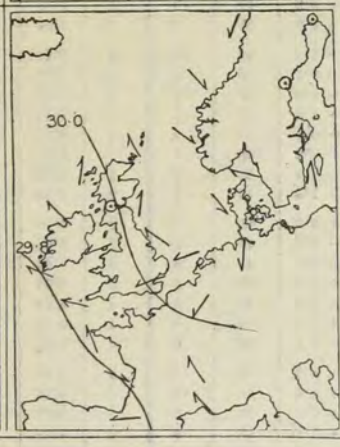
Bright sunshine has been more prevalent than during any previous week this year, the percentage of possible duration varying from 30 in "England, N.E." to 51 in "England, S.", 58 in the "Channel Islands", and 64 in "Scotland, N."

Depressions observed.—During the earlier half of the week an anticyclone lay over Scandinavia, while areas of low pressure were found at first over France, and subsequently over Spain and the Bay of Biscay. The prevailing winds were therefore Easterly or North-Easterly. The only depressions observed at this time were a small shallow disturbance which formed over the east of England on the night of the 21st and subsequently dispersed without changing its position, and a larger area of low pressure which advanced from the southward and skirted our south-west coasts on the 23rd. The latter system occasioned moderate gales from east in the south of Ireland and the south-west of England. During the concluding half of the week the highest pressures were found over the North Sea and the east coasts of Great Britain, and the only depressions observed were some large but unimportant disturbances which passed over Scandinavia. The wind remained Easterly until quite the close of the period, when it shifted to South-East or South in the west or north.

E 22049. 350.—4/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		Tuesday, April 20. *Weather* dull at first; slightly showery at some south-western and eastern stations; dry elsewhere. Sky clearing later, especially in Ireland and Scotland. Severe thunderstorms over France. *Temperature* uniformly low; the highest of the daily maxima being 50° to 55°. *Wind* Easterly; fresh to strong over Ireland and England, but light in Scotland, with a slight Southerly tendency. Moderating later over England. *Sea* rough in east and north-east. *Barometer* highest (30·2 ins. to 30·3 ins.) in north, lowest over France. Rising slowly except in north-west, the rise being greatest in the south.	
		Wednesday, April 21. *Weather* fair and dry generally, but with some showers on our north-eastern and eastern coasts. *Temperature* continuing falling generally, maxima for day being below 50° at nearly all the English stations, but ranging from 50° to 56° in the West. *Wind* North-Easterly over England, South-Easterly in Ireland and Scotland; fresh to moderate in force. *Sea* going down in north-east; still rough on our east coast. *Barometer* still highest in north, lowest in south. Depressions noticed over France yesterday passing eastwards to Germany. Barometer rising slightly.	
		**Thursday, April 22.** *Weather* still rather showery in the north-east, and dry elsewhere, but hazy in some places, and dull in others. Sky clearing later. *Temperature* little changed; still low generally for time of year. Maxima very little above 50°. *Wind* North-Easterly, moderate in north and west, Westerly and South-Westerly for a time on our eastern coasts. *Sea* moderate in south-west, smooth elsewhere. *Barometer* still highest over Scandinavia, lowest over and to westward of the Bay of Biscay; small depression off our north-east coasts during the day, but subsequently dispersing.	
		Friday, April 23. *Weather* fine generally at first, but afterwards showery at all our western stations. Unsettled appearance in London at night. *Temperature*, though low at first, rising during day to between 60° and 65° over our southern and south-midland counties, and to 75° in west of France. Night cool again. *Wind* Easterly, fresh in the west, light in the east; afterwards veering to South-East in the west, and blowing rather strongly. *Sea* rough in south-west and west, smooth or nearly so elsewhere. *Barometer* highest over Sweden and Northern Europe, lowest off our south-western coasts; gradients very slight in the east. Depression off south-west of our Islands moving northwards.	

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather. at 8 a.m.
		**Saturday, April 24.** *Weather* less settled than of late: showers in several localities, thunderstorms in the south. *Temperature* changing fitfully; maxima 65° to 70° over our southern and south midland counties, only 50° to 60° in Ireland, and still lower in Scotland. Those in south-west of France rising to above 80°. *Wind* variable between South-East and East; moderate generally, but strong at Valencia. *Sea* rough in the extreme south-west only. *Barometer* fallen greatly over Scandinavia, risen in our Islands. Highest in a band lying over North Sea, lowest off our west and south-west coasts. Several local irregularities in pressure observed over the United Kingdom.	
		**Sunday, April 25.** *Weather* fine generally at first, slightly showery in the west and north later (much rain at Stornoway). Air very dry over England. *Temperature* fallen again over England, but risen in Ireland. Maxima at English stations only 60° to 63°, those in Ireland 61° to 66°, those in south-western and central France 77° to 79°. *Wind* Easterly in the south and east, strong in the Channel and a gale at Scilly; South-Easterly to Southerly in Ireland and Scotland. *Sea* rough at Scilly, moderate in the Channel, smooth elsewhere. *Barometer* highest over Scotland, the north-east of England, and the North Sea, lowest off our south-west coasts. Gradients slight. Barometer inclined to fall later.	
		**Monday, April 26.** *Weather* fine generally at first and continuing so, except in far north and over parts of our southern counties, where rain fell. Afterwards becoming very unsettled, with snow in the Shetlands. Thunderstorm at Hurst Castle. *Temperature* risen decidedly in Ireland, still low in the east. Spurn Head 19° colder than Valencia. Day very warm in west, cool in east. Sudden rapid fall in Shetlands at night. *Wind* strong Easterly in south, moderate or light South-Easterly and Southerly elsewhere; afterwards shifting to North-East at Sumburgh Head, and blowing strongly. *Sea* rough in south-west, and on our east coast. *Barometer* still highest over North Sea, and lowest off our south-west coasts. Small depression forming over Moray Firth later, and causing the snow, &c. at Sumburgh Head referred to above.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 65 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	50	35	46·9	37·6	42·0	− 1·8	14	12	1	0·85	+0·38	*	*
	Stornoway	55	33	52·3	37·0	44·3	− 0·8	37	14	2	0·71	+0·13	67	64
	Wick	55	28	51·9	35·1	43·1	− 1·4	37	19	2	0·30	−0·05	*	*
1. SCOTLAND, E.	Nairn	54	24	53·0	31·6	41·8	− 3·9	31	41	2	0·07	−0·23	*	*
	Aberdeen	60	31	50·7	34·9	42·4	− 2·8	33	20	2	0·14	−0·37	53	51
	Leith	55	33	50·1	38·3	43·9	− 3·1	29	10	0	—	−0·38	*	*
2. ENGLAND, N.E.	Alnwick Castle	56	36	46·6	37·9	42·0	− 3·9	13	11	2	0·09	−0·45	*	*
	Durham	60	35	47·2	37·5	42·1	− 4·1	20	13	4	0·23	−0·29	28	28
	Shields	47	37	45·0	39·0	41·9	− 4·6	8	12	3	0·17	−0·27	*	*
	Scarborough ℜ	47	37	44·3	38·9	41·5	− 5·4	6	12	2	0·17	−0·28	*	*
	York	57	35	52·4	38·3	45·0	− 3·1	37	10	1	0·02	−0·51	32	32
	Spurn Head	48	37	45·0	39·4	42·1	− 5·2	12	7	3	0·06	?	*	*
3. ENGLAND, E.	Hillington ℜ	62	36	51·8	38·4	44·8	− 4·3	35	10	0	—	−0·43	34	34
	Yarmouth	49	38	47·1	39·7	43·2	− 6·2	18	6	2	0·02	−0·39	*	*
	Geldeston	57	33	50·0	39·1	44·3	− 4·7	28	8	2	0·02	−0·34	37	37
	Cambridge	68	35	57·6	39·0	47·9	− 2·2	54	8	1	0·01	−0·39		
	Rothamsted	66	37	57·0	40·4	48·3	− 0·3	51	4	2	0·06	−0·44	*	*
	Ingatestone	64	35	55·0	39·8	47·0	− 2·3	44	6	0	—	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	60	33	54·4	37·4	45·5	− 3·7	44	13	1	0·01	−0·40	29	29
	Loughborough	69	36	53·3	39·6	48·5	− 0·4	56	7	1	0·04	−0·39	*	*
	Leicester	69	36	57·9	39·7	48·4	− 0·3	54	6	2	0·10	−0·35	32	32
	Cheadle ℜ	62	35	54·9	38·8	46·5	− 0·6	45	9	1	0·06	−0·46	*	*
	Churchstoke ℜ	65	33	56·6	38·2	47·0	− 1·7	51	11	2	0·10	−0·30	34	34
	Hereford ℜ	71	37	60·1	41·3	50·3	+ 0·8	61	2	2	0·13	−0·29	*	*
	Cirencester	70	32	58 0	39·7	48·4	− 0·1	54	6	2	0·15	−0·37	43	43
	Oxford	69	37	59·1	41·6	49·9	+ 0·3	57	1	1	0·08	−0·34	45	45
5. ENGLAND, S.	London†	70	40	58·6	43·1	50·5	+ 0·1	60	0	0	—	−0·43	43	43
	Strathfield Turgiss ℜ												*	*
	Dungeness	56	37	52·6	40·7	46·4	− 3·8	36	4	0	—	−0·42	*	*
	Hastings (St. Leonard's)	65	40	56·9	44·0	50·1	+ 0·2	57	0	0	—	−0·47	51	52
	Southampton	71	39	63·5	44·4	53·5	+ 3·6	81	0	1	0·02	−0·46	57	58
	Hurst Castle	64	40	57·1	44·3	50·4	+ 0·4	59	0	3	0·15	−0·37	*	*
	Stowell ℜ	69	38	61·1	42·3	51·3	+ 1·8	65	0	2	0·12	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	62	31	55·1	38·5	46·4	− 0·4	46	10	2	0·14	−0·72	*	*
	Glasgow	60	34	51·7	38·3	44·7	− 1·8	34	10	1	0·03	−0·50	36	35
	Ardrossan	62	34	54·0	38·6	45·9	− 0·6	42	10	1	0·07	−0·45	*	*
	Douglas (Isle of Man)	56	39	52·4	41·9	46·9	− 0·9	35	0	3	0·21	−0·32	56	55
7. ENGLAND, N.W.	Newton Reigny (Penrith)	65	35	53·8	37·9	45·5	− 1·0	42	11	4	0·10	−0·33	51	50
	Barrow-in-Furness	61	38	56·1	41·9	48·7	− 0·1	47	0	1	0·15	−0·30	*	*
	Stonyhurst	59	36	52·6	39·0	45·5	− 2·2	37	8	2	0·15	−0·41	44	44
	Blackpool ℜ	64	34	56·0	39·6	47·4	− 1·8	48	7	2	0·11	−0·29	40	39
	Manchester	63	38	55·2	40·5	47·5	− 0·1	45	4	1	0·19	−0·29	*	*
	Liverpool Obs? (Bidston)	62	39	56·4	41·7	48·7	+ 0·2	48	1	2	0·16	−0·21	*	*
	Llandudno ℜ	65	36	56·7	42·8	49·4	− 0·4	52	0	2	0·38	0·00	49	49
	Holyhead	64	38	54·7	42·7	48·4	− 1·4	45	0	2	0·26	−0·16	*	*
8. ENGLAND, S.W.	Llandovery	70	26	61·9	39·3	50·1	+ 0·2	68	8	2	0·24	−0·41	*	*
	Pembroke	60	38	54·7	43·1	48·6	− 1·2	46	0	2	0·45	−0·03	49	49
	Arlington (N. Devon)	67	30	60·3	40·9	50·1	+ 1·3	61	3	2	0·45	−0·25	*	*
	Cullompton ℜ	69	34	60·5	41·9	50·8	+ 1·0	62	0	3	0·54	−0·08	42	42
	Falmouth	57	39	52·4	44·8	48·4	− 1·4	45	0	4	0·64	−0·07	44	44
	Plymouth	63	37	58·1	44·7	51·1	+ 0·4	64	0	4	0·73	+0·04	48	48
	Prawle Point	63	37	53·9	42·6	48·0	− 1·7	42	0	4	0·27	?	*	*
9. IRELAND, N.	Malin Head	64	38	51·9	40·9	46·1	− 1·2	33	3	2	0·05	?	*	*
	Londonderry	70	31	59·8	37·8	48·3	+ 0·4	62	12	2	0·07	−0·46	*	*
	Mullaghmore	67	28	57·1	41·3	48·8	+ 0·1	51	2	3	0·15	−0·32	*	*
	Belmullet	67	38	58·1	43·3	50·3	+ 1·5	58	0	2	0·05	?	*	*
	Markree Castle	68	29	58·3	38·2	47·8	− 0·8	57	11	2	0·13	−0·42	55	54
	Brookeborough	63	32	57·8	38·8	47·8	− 0·5	54	9	1	0·11	?	*	*
	Armagh	63	30	56·2	38·3	46·8	− 1·3	49	10	2	0·06	−0·45	42	42
	Donaghadee	53	36	50·9	41·1	45·8	− 2·6	30	3	2	0·12	−0·36	*	*
	Edgeworthstown	63	32	56·6	37·4	46·5	− 2·7	51	13	1	0·30	−0·23	*	*
10. IRELAND, S.	Dublin	61	35	54·9	41·7	48·0	− 1·2	43	1	1	0·14	−0·34	50	50
	Parsonstown	67	36	58·6	41·0	49·4	+ 0·4	56	3	2	0·13	−0·37	40	40
	Kilkenny	65	37	57·1	41·4	48·9	0·0	51	2	2	0·36	−0·16	*	*
	Waterford	60	37	55·1	41 6	48·0	− 1·5	44	1	3	0·68	+0·03	*	*
	Roche's Point	58	41	54·1	44·4	49·0	− 0·6	49	0	3	0·50	−0·27	*	*
	Valencia	65	43	58·1	46·1	51·8	+ 2·0	69	0	2	0·16	−0·71	42	42
	Killarney	64	33	56·5	42·1	49·0	− 0·5	49	0	1	0·12	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	43	51·9	45·0	48·3	− 2·2	44	0	4	0·12	−0·44	*	*
	Jersey (Noirmont)	68	41	59·4	46·6	52·7	+ 2·4	75	0	0	—	−0·46	57	58

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 18.] *New Series.* WEEK ENDING MONDAY, 3RD MAY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1833-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 72.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	61	27	48·4	36·1	42·0	3 below.	18	17	143	− 69	639	+152
	1. SCOTLAND, EAST	72	31	53·0	36·5	44·5	2 below.	41	15	228	− 71	723	+195
	2. ENGLAND, N.E.	67	27	51·4	36·0	43·3	4 below.	34	17	197	−105	690	+217
	3. ENGLAND, EAST	71	25	55·1	34·3	44·2	6 below.	48	22	289	−116	748	+251
	4. MIDLAND COUNTIES	71	28	57·6	34·7	45·6	4 below.	56	20	315	−118	716	+223
	5. ENGLAND, SOUTH	73	29	56·7	39·0 *	47·4	4 below.	50	8	317	−143	588	+219
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	65	29	53·3	38·0	45·3	2 below.	40	11	213	−126	571	+182
	7. ENGLAND, N.W.	70	23	54·5	37·5	45·6	4 below.	44	13	250	− 96	607	+229
	8. ENGLAND, S.W.	? 77	28	56·8	40·3	48·2	2 below.	51	5	317	−167	490	+259
	9. IRELAND, NORTH	73	26	55·7	39·5	47·3	2 below.	48	7	286	−123	484	+141
	10. IRELAND, SOUTH	71	27	56·6	41·3	48·6	2 below.	49	2	363	−166	397	+162
	— CHANNEL ISLANDS	70	40	54·4	45·5	49·8	2 below.	55	0	335	−165	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 72.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	4	0 (average).	91	+11	12·3	+ 0·9	41	38	412	+ 41	31	+ 4
	1. SCOTLAND, EAST	2	3	1 less.	73	+ 9	7·3	+ 0·1	43	40	391	− 20	29	− 1
	2. ENGLAND, N.E.	2	2	2 less.	76	+13	8·4	+ 1·1	45	43	321	− 20	24	− 1
	3. ENGLAND, EAST	1	1	3 less.	70	+ 5	6·6	− 0·3	60	59	387 †	− 51	28	− 3
	4. MIDLAND COUNTIES	1	3	1 less.	69	+ 8	9·0	+ 0·9	51	50	341	− 49	25	− 3
	5. ENGLAND, SOUTH	2	3	1 less.	66	+ 6	8·4	0·0	61	60	374	− 38	27	− 3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	2	3	4 less.	75	+ 3	14·6	+ 1·9	45	43	336	− 37	25	− 2
	7. ENGLAND, N.W.	2	2	2 less.	73	+ 8	12·0	+ 2·1	44	43	332	− 34	24	− 3
	8. ENGLAND, S.W.	2	2	4 less.	76	+ 7	13·6	0·0	52	51	377	− 79	27	− 6
	9. IRELAND, NORTH	3	4	1 less.	77	− 1	12·5	+ 1·9	49	47	320	− 76	24	− 4
	10. IRELAND, SOUTH	3	7	1 more.	74	0	14·7	+ 1·7	38	37	374	− 75	27	− 6
	— CHANNEL ISLANDS	3	3	2 less.	89	+13	11·4	+ 0·8	57	56	484	− 65	35	− 4

General Remarks.

Weather has been fair and dry generally, especially over England. Rain fell, however, in nearly all parts of the Kingdom on April 27th and 28th (accompanied by thunder and lightning at some of our south-western stations), and on May 2nd and 3rd dull, rainy weather again prevailed over Ireland.

Temperature has been b low the mean in all districts, the deficit ranging from 2° or 3° in Ireland and Scotland to 4° over the greater part of England, and to as much as 6° in "England, E." The highest of the maxima, which were recorded either on April 27th or 28th, varied between 61° in "Scotland, N.", 65° in "Scotland, W.", and 73° in "England, S." and "Ireland, N.". Between April 28th and 29th a sudden and decided fall occurred, and the maximum readings on the latter date were nearly all below 50°. The lowest of the minima, which were generally recorded during the early morning of May 1st, varied between 23° in "England, N.W.", 31° in "Scotland, E.", and 40° in the "Channel Islands". Thermometers exposed on the grass have registered some severe frosts; in London during the night of April 30th—May 1st a reading of 19° was recorded.

Rainfall has been a little more than the mean in "Ireland, S." and about equal to its normal amount in "Scotland, N.", but less in all other districts.

Bright sunshine has been more prevalent over England than it was last week, but over Ireland and Scotland a decrease is shown. The percentages of the possible amount of duration ranged from 37 in "Ireland, S." and 38 in "Scotland, N." to 59 in "England, E." and 60 in "England, S."

Depressions observed.—The distribution of barometric pressure was generally anti-cyclonic and the only depression observed over our Islands was a small one which lay off the north-east of Scotland on April 27th. Towards the end of the period, however, depressions had begun to appear off our extreme western coasts. Moderate to fresh or strong North-Easterly and Easterly breezes were experienced over the United Kingdom during the greater part of the week, but as it drew towards its close South-Easterly and Southerly breezes had become general.

* In the Report for the week ending April 19th, the corresponding value should read "38·8".
† This value has been altered slightly owing to the receipt of some arrears of observations.

E 22118. 350.—5/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

Weather

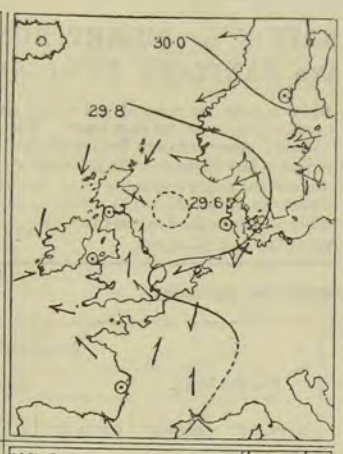
During the 24 hours succeeding

8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Tuesday, April 27.

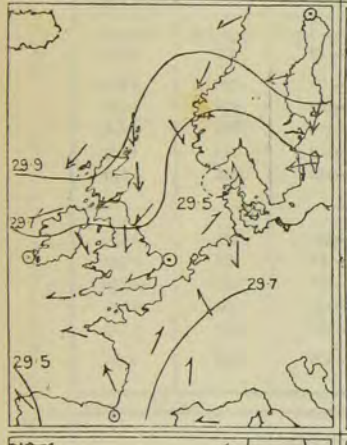
Weather fair at first in most places, but breaking up very suddenly in far north, where snow and cold rain set in. Subsequently becoming unsettled generally, with halos, lightning, and some thunder over England.

Temperature low over England and very low in Shetland Isles; high in east of Scotland. Sumburgh Head 24° colder than Aberdeen. Cold weather spreading over Scotland later.

Wind chiefly Easterly and South-Easterly, except in north, where very variable. Aberdeen light South-Westerly veering to North-West; Sumburgh Head strong North-Easterly. Direction varying greatly in northern parts of Ireland and England later.

Sea slight except in far north.

Barometer highest over Scandinavia, Baltic, and Germany, lowest over Atlantic; gradients slight. Local depression formed over Moray Firth, and other shallow systems advancing later over England and France.



Wednesday, April 28.

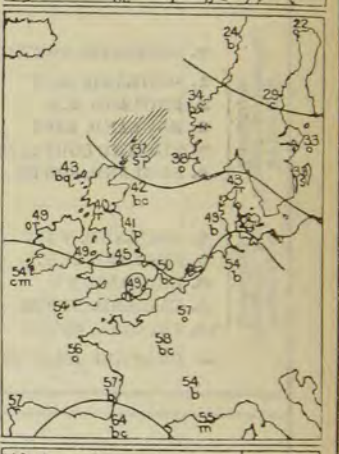
Weather fine in most parts of Scotland, France, and the Netherlands, but cloudy and unsettled elsewhere, with rain in many places, hail at Wick, and snow at Sumburgh Head. Thunder occurring at several of our southern stations later.

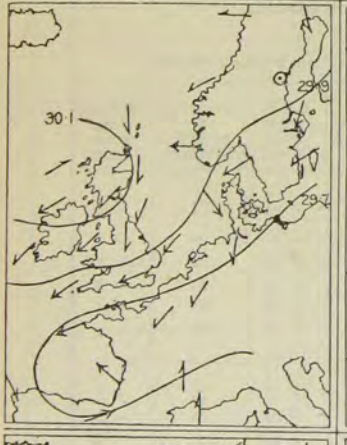
Temperature fallen rapidly in north, but risen in south; readings ranging from 57° at Jersey to 38° at Wick. Sudden fall occurring over England in afternoon.

Wind strong North-Easterly over Scandinavia and the northern parts of our Islands, and light Easterly in the south of England, but variable elsewhere. The strong North-Easterly breeze subsequently extending southwards.

Sea rather rough at Sumburgh Head, but moderate to smooth elsewhere.

Barometer falling at all but our extreme northern stations. Depressions noticed on previous day now moving eastwards over the North Sea and France, and high pressure system appearing in extreme north. Rise taking place generally later.





Thursday, April 29.

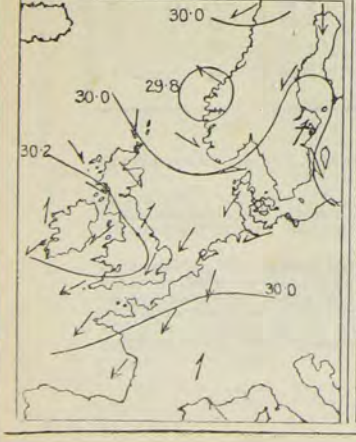
Weather rainy in the south-east of England, and showery on our south-west coast, but generally fine elsewhere. Improvement taking place in south later. Bright aurora seen at Wick in evening.

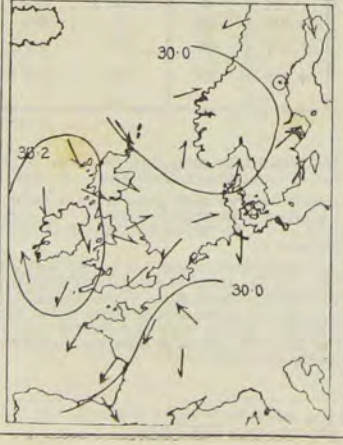
Temperature risen slightly in Scotland, but fallen elsewhere, several degrees over England and Ireland; readings ranging from 46° at Scilly and Jersey to 38° in London and at Oxford. Frost occurring in many places at night.

Wind light from the Northward in Scotland, but fresh or strong from East or North-East elsewhere. Subsequently backing to North-West or West on our extreme northern coasts.

Sea rather rough on most of the English coasts, but moderate to smooth elsewhere.

Barometer rising generally. Anticyclone with readings above 30·1 ins. extending over our Islands from the northward and north-westward. Slight fall taking place in extreme north later.





Friday, April 30.

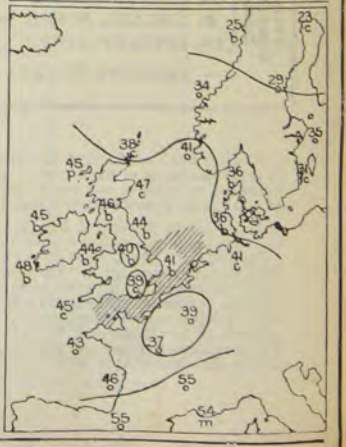
Weather fine in most parts of England and Ireland, but cloudy elsewhere, with rain at Nairn, and passing showers at Stornoway and Spurn Head. Cold showers falling later at many of the northern stations.

Temperature fallen several degrees in France, but risen slightly elsewhere; readings over our Islands ranging from 48° at Valencia to 39° in London and 38° at Sumburgh Head and Barrow-in-Furness. Frost occurring at night at many of the inland stations. Thermometer on grass in London falling to 19°.

Wind moderate North-Westerly in the north, but strong North-Easterly in the south. North-Easterly breeze moderating later.

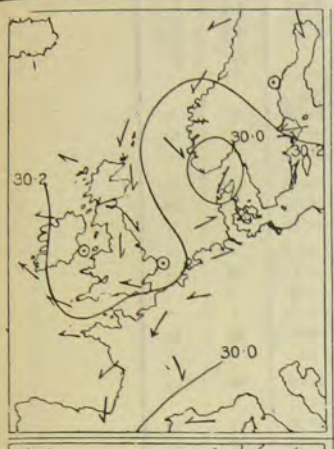
Sea rather rough in south and south-west, but moderate to smooth elsewhere.

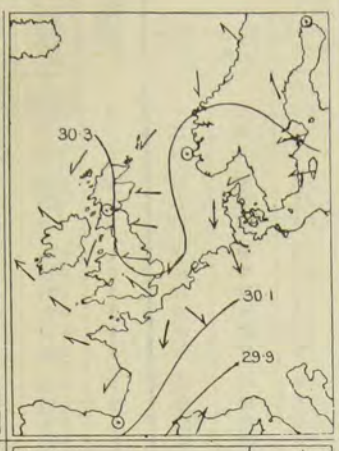
Barometer rising at all but the Norwegian and Scotch stations. Anticyclone lying over Ireland and the west of England, with well marked depression over the west of Norway.



SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather. During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.





Saturday, May 1.

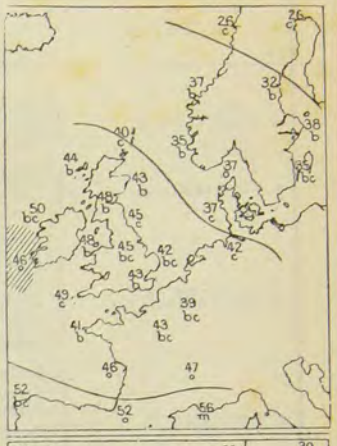
Weather fine generally but dull in the south of France and also at Valencia. Rain falling in west of Ireland at night.

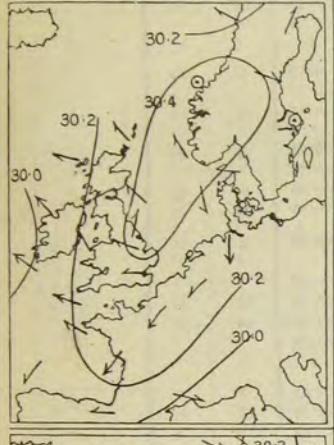
Temperature fallen slightly in the north of Scotland but risen elsewhere; readings ranging from 50° at Mullaghmore and 49° at Scilly to 40° at Sumburgh Head. Frost again occurring in many places at night; thermometer on grass falling to 26° at Loughborough and 23° in London.

Wind light or moderate Northerly in the north and east, but North-Easterly in the south and South-Easterly in the west. South-Easterly breeze subsequently increasing in Ireland.

Sea rather rough at Valencia, slight or smooth elsewhere.

Barometer rising at all but the Irish stations. Large anticyclone lying over our Islands and the north of Scandinavia, with shallow depression near the Skager Rack. Fall taking place later at most of our western stations.





Sunday, May 2.

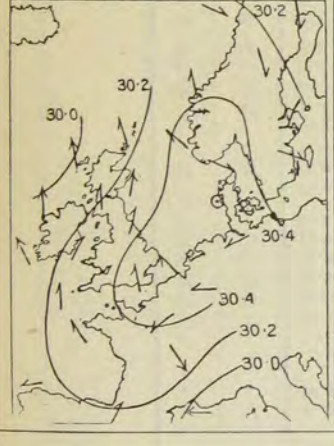
Weather dull in the extreme west of our Islands, with rain at Valencia, but fine elsewhere. Rain falling later in the west generally—heavily at Roche's Point.

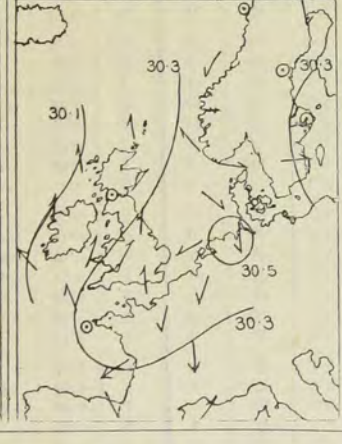
Temperature fallen a little over the northern parts of England and Ireland, but risen slightly in most other localities; readings ranging from 52° at Scilly to 40° in the Shetlands. Night less cold than of late.

Wind North-Easterly at most of the continental stations, but South-Easterly in our Islands; strong breezes or moderate gales reported in Ireland. Subsequently freshening from South in Scotland.

Sea rough off the south of Ireland, moderate to smooth elsewhere.

Barometer falling somewhat decidedly on our western coasts, but rising elsewhere. Anticyclone now lying over Norway and the North Sea, with a depression off the west of Ireland. Depression subsequently moving northwards, and barometric fall extending northwards and eastwards.





Monday, May 3.

Weather dull at several of our western and northern stations, with rain at Stornoway, but fine elsewhere. Rain falling in Ireland at night, heavily at Valencia.

Temperature risen generally; readings ranging from 55° at Mullaghmore and Parsonstown to 44° at Sumburgh Head, York, Barrow-in-Furness, and Yarmouth. Ground frost over England at night, lowest grass readings being 24° at Oxford and 26° in London.

Wind Northerly in Sweden and the east of France and Easterly over the Bay of Biscay, but chiefly Southerly in our Islands; strong in force at some of our northern stations. Subsequently backing to South-East at Valencia, and blowing strongly.

Sea rather rough at Stornoway and Valencia, moderate to smooth elsewhere.

Barometer rising at all but the Scotch stations. Anticyclone extending from the south of Norway to the south-east of England, with a depression off our extreme north-west coasts. New depression approaching Ireland in evening.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ≫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 69 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	50	32	44·1	34·0	38·8	− 5·9	6	28	5	0·57	+0·12	*	*
	Stornoway	53	31	50·3	38·0	43·9	− 0·9	30	11	5	0·27	−0·31	41	38
	Wick	61	27	50·9	36·4	43·3	− 2·1	33	16	5	0·47	+0·12	*	*
1. SCOTLAND, E.	Nairn	62	31	52·7	36·4	44·2	− 2·2	39	16	3	0·53	+0·18	*	*
	Aberdeen	61	33	51·0	36·6	43·5	− 2·7	33	15	2	0·19	−0·30	43	40
	Leith	72	33	55·4	36·4	45·7	− 1·3	49	16	2	0·28	−0·10	*	*
2. ENGLAND, N.E.	Alnwick Castle	66	30	50·4	36·1	42·8	− 3·9	30	17	1	0·20	−0·32	*	*
	Durham	67	27	55·3	33·0	43·6	− 3·6	49	25	3	0·09	−0·41	46	44
	Shields	63	30	50·4	36·1	42·9	− 4·4	31	17	2	0·12	−0·30	*	*
	Scarborough ⁂	57	35	50·7	37·5	43·8	− 4·0	32	13	2	0·24	−0·19	*	*
	York	66	28	54·9	34·6	44·3	− 4·8	47	21	2	0·36	−0·06	43	41
	Spurn Head	52	37	46·7	38·7	42·5	− 5·5	17	9	3	0·42	?	*	*
3. ENGLAND, E.	Hillington ⁂	69	26	56·9	33·2	44·5	− 5·6	54	25	1	0·19	−0·23	61	59
	Yarmouth	53	33	47·9	38·6	43·0	− 7·6	21	10	2	0·20	−0·21	*	*
	Geldeston	62	27	52·6	33·0	42·3	− 7·5	40	25	1	0·11	−0·26	56	55
	Cambridge	71	26	60·6	32·6	45·9	− 5·3	67	26	1	0·16	−0·24	64	63
	Rothamsted	66	25	57·1	33·3	44·6	− 4·7	55	24	1	0·12	−0·36	*	*
	Ingatestone	62	30	55·6	35·2	44·9	− 7·2	49	19	1	0·07	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	70	29	56·0	33·0	44·0	− 6·1	52	25	2	0·33	−0·09	44	43
	Loughborough	71	30	58·4	34·4	45·8	− 4·2	59	21	1	0·24	−0·19	*	*
	Leicester	70	31	58·2	34·7	45·9	− 4·9	58	20	1	0·19	−0·26	43	42
	Cheadle ⁂	66	30	55·2	33·6	43·9	− 4·4	49	24	2	0·39	−0·13	*	*
	Churchstoke ⁂	71	28	56·2	34·7	44·9	− 3·7	51	20	1	0·07	−0·33	47	46
	Hereford ⁂	69	30	59·4	37·4	47·9	− 2·5	61	13	1	0·20	−0·23	*	*
	Cirencester	68	28	59·4	33·4	45·8	− 3·8	63	24	1	0·25	−0·25	58	57
	Oxford	68	31	58·3	36·1	46·7	− 3·9	58	17	1	0·82	+0·40	62	61
5. ENGLAND, S.	London†	68	29	59·3	37·3	47·8	− 3·6	60	13	3	0·48	+0·06	52	51
	Strathfield Turgiss ⁂												*	*
	Dungeness	58	34	52·7	40·7	46·4	− 4·4	36	4	2	0·04	−0·36	*	*
	Hastings (St. Leonard's)	66	34	54·0	39·6	46·3	− 4·7	40	7	2	0·15	−0·20	67	66
	Southampton	73	31	60·0	38·9	49·0	− 1·7	62	9	1	1·04	+0·69	65	64
	Hurst Castle	66	34	56·9	40·7	48·4	− 2·7	50	4	2	0·16	−0·25	*	*
	Stowell ⁂	70	31	57·1	36·9	46·5	− 3·8	53	14	1	0·08	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	60	30	53·1	38·3	45·3	− 2·2	39	10	3	0·65	−0·22	*	*
	Glasgow	65	32	54·6	37·7	45·7	− 1·4	44	12	1	0·20	−0·32	37	35
	Ardrossan	58	32	52·9	38·0	45·1	− 2·2	39	11	2	0·03	−0·49	*	*
	Douglas (Isle of Man)	62	29	52·4	38·1	44·9	− 3·2	37	11	3	0·25	−0·25	52	50
7. ENGLAND, N.W.	Newton Reigny (Penrith)	69	23	54·7	33·0	43·3	− 3·9	47	25	2	0·10	−0·32	42	40
	Barrow-in-Furness	63	33	53·3	39·3	46·0	− 3·6	39	8	3	0·21	−0·32	*	*
	Stonyhurst	66	28	54·1	34·6	43·9	− 4·7	44	21	2	0·55	−0·02	49	47
	Blackpool ⁂	68	27	53·8	35·1	44·0	− 5·8	43	19	3	0·41	+0·01	35	34
	Manchester	68	31	55·3	36·3	45·3	− 3·8	47	16	2	0·09	−0·39	*	*
	Liverpool Obsy (Bidston)	70	34	56·0	39·9	47·6	− 2·2	48	6	3	0·21	−0·16	*	*
	Llandudno ⁂	67	33	56·7	39·7	47·8	− 2·6	50	6	1	0·08	−0·30	50	49
	Holyhead	58	37	52·4	42·1	47·0	− 3·6	35	0	2	0·05	−0·37	*	*
8. ENGLAND, S.W.	Llandovery	77	28	62·9	35·9	48·8	− 1·9	73	17	1	0·17	−0·45	*	*
	Pembroke	63	36	53·9	42·6	48·0	− 2·3	42	0	2	0·14	−0·33	51	50
	Arlington (N. Devon)	70	32	58·3	39·4	48·4	− 1·2	56	7	2	0·18	−0·51	*	*
	Cullompton ⁂	70	30	58·6	37·5	47·6	− 3·2	58	13	1	0·11	−0·46	56	55
	Falmouth	59	37	53·7	43·8	48·5	− 2·1	46	0	3	0·58	−0·09	49	48
	Plymouth	67	35	57·5	42·1	49·4	− 2·2	52	0	2	0·23	−0·30	52	51
	Prawle Point	67	35	52·7	41·0	46·6	− 3·8	36	3	2	0·11	?	*	*
9. IRELAND, N.	Malin Head	61	35	53·7	41·3	47·2	− 1·0	39	2	4	0·27	?	*	*
	Londonderry	73	29	59·8	37·8	48·3	− 0·4	62	12	2	0·08	−0·45	*	*
	Mullaghmore	63	39	55·3	44·9	49·9	+ 0·3	55	0	3	0·40	−0·10	*	*
	Belmullet	66	36	54·6	43·3	48·7	− 0·7	47	0	3	0·43	?	*	*
	Markree Castle	70	26	56·8	36·9	46·4	− 3·1	52	14	4	1·05	+0·53	49	47
	Brookeborough	71	28	57·2	37·2	46·7	− 2·7	53	13	3	0·57	?	*	*
	Armagh	66	29	56·3	36·4	45·9	− 3·0	51	16	3	0·12	−0·37	48	46
	Donaghadee	58	32	51·0	39·0	44·7	− 4·5	32	8	3	0·09	−0·39	*	*
	Edgeworthstown	64	30	57·0	38·9	47·5	− 2·8	52	9	4	0·42	−0·10	*	*
10. IRELAND, S.	Dublin	65	33	56·0	41·6	48·4	− 1·4	46	1	2	0·28	−0·18	48	47
	Parsonstown	71	28	58·6	40·0	48·9	− 0·7	57	6	2	0·26	−0·24	43	42
	Kilkenny	64	28	56·0	39·3	47·3	− 2·7	48	8	2	0·20	−0·28	*	*
	Waterford	64	29	56·9	39·6	47·8	− 2·5	51	7	4	0·66	+0·04	*	*
	Roche's Point	60	36	53·7	43·3	48·3	− 2·1	44	0	3	1·60	+0·85	*	*
	Valencia	64	34	56·0	43·7	49·6	− 0·8	53	0	2	1·19	+0·43	23	23
	Killarney	64	27	59·1	41·5	49·9	− 0·5	57	1	3	0·58	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	41	52·9	45·3	48·9	− 2·3	48	0	2	0·35	−0·16	*	*
	Jersey (Noirmont)	70	40	55·9	45·7	50·6	− 0·6	60	0	3	0·22	−0·20	57	56

Stations marked ⁂ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 19.] *New Series.* WEEK ENDING MONDAY, 10TH MAY, 1886. [*Price 4d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 76.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	64	31	52·0	40·1	45·7	0 (average)	34	5	177	− 63	644	+145
	1. SCOTLAND, EAST	69	35	56·7	43·7	49·6	1 above.	53	0	281	− 60	723	+186
	2. ENGLAND, N.E.	74	38	57·5	44·3	50·5	2 above.	60	0	257	− 88	690	+210
	3. ENGLAND, EAST	75	32	65·2	43·0	53·3	2 above.	79	0	368	− 91	748	+245
	4. MIDLAND COUNTIES	77	29	67·6	43·7	54·9	4 above.	90	0	405	− 85	716	+216
	5. ENGLAND, SOUTH	76	29	65·7	43·4	54·2	3 above.	85	0	402	−118	588	+216
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	64	36	54·0	44·6	49·0	1 above.	49	0	262	−121	571	+175
	7. ENGLAND, N.W.	70	37	60·2	45·5	52·4	2 above.	73	0	323	− 70	607	+225
	8. ENGLAND, S.W.	74	31	63·6	44·2	53·3	2 above.	79	0	396	−144	490	+257
	9. IRELAND, NORTH	68	39	57·6	47·0	52·0	2 above.	70	0	356	−101	484	+136
	10. IRELAND, SOUTH	68	35	58·9	47·8	53·0	2 above.	77	0	440	−145	397	+159
	— CHANNEL ISLANDS	72	43	61·9	49·3	55·2	3 above.	92	0	477	−133	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 76.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	2	2 less.	95	+13	12·5	− 0·3	28	25	440	+ 30	31	+ 3
	1. SCOTLAND, EAST	4	4	0 (average).	77	+10	7·7	− 0·7	21	19	412	− 46	28	− 3
	2. ENGLAND, N.E.	4	5	1 more.	80	+13	8·9	+ 0·2	22	21	343	− 42	23	− 3
	3. ENGLAND, EAST	1	1	3 less.	71	+ 2	6·7	− 1·4	44	42	431	− 55	29	− 3
	4. MIDLAND COUNTIES	2	2	2 less.	71	+ 6	9·2	− 0·2	45	43	386	− 49	26	− 3
	5. ENGLAND, SOUTH	1	less than ½	4 less.	67	+ 3	8·4	− 1·3	57	54	431	− 25	29	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	6	1 more.	80	+ 5	15·2	+ 0·9	15	14	351	− 67	24	− 4
	7. ENGLAND, N.W.	4	6	2 more.	77	+ 9	12·6	+ 1·4	28	27	360	− 53	25	− 3
	8. ENGLAND, S.W.	2	1	5 less.	78	+ 5	13·7	− 1·7	52	50	429	− 76	29	− 5
	9. IRELAND, NORTH	4	5	0 (average)	81	− 1	13·0	+ 0·9	9	8	329	−116	22	− 8
	10. IRELAND, SOUTH	4	5	1 less.	78	0	15·2	+ 0·3	13	12	387	−114	26	− 8
	— CHANNEL ISLANDS	3	1	3 less.	92	+13	11·5	− 0·5	69	67	553	− 58	37	− 3

General Remarks.

Weather has been fine and bright during the greater part of the period and the air very dry. Some rain fell, however, at our extreme western and northern stations on the 4th and 5th, and at the end of the week overcast skies and rain were reported from nearly all parts of the Kingdom.

Temperature has been equal to the mean value in "Scotland, N.", but in the other districts it has varied between 1° and 4° above. The maxima, which were generally registered on the 7th, ranged from 64° in the west and north of Scotland to between 74° and 77° over eastern, central, and southern England. The minima, which were recorded in most places either on the 4th or 5th, varied from 29° in the "Midland Counties" and "England, S." to 39° in "Ireland, N." and 43° in the "Channel Islands".

Rainfall has been rather more than the mean over the northern parts of England and the west of Scotland, and equal to it in "Scotland, E." and "Ireland, N.", but in all other districts it has been less than the normal value.

Bright sunshine shows an increase in the "Channel Islands" but a decrease elsewhere, especially in Ireland, Scotland, and the north of England. The percentages of the possible amount of duration ranged from 8 in "Ireland, N.", 12 in "Ireland, S.", and 14 in "Scotland, W.", to 54 in "England, S." and 67 in the "Channel Islands".

Depressions observed.—The distribution of barometric pressure over our Islands continued anticyclonic until towards the end of the period, when a shallow depression had reached our southern coasts and the north of France from the south-westward. During the first part of the time Southerly breezes were general over the United Kingdom, but during the last few days light Easterly breezes were experienced.

ERRATA (*see* page 75, bottom).

E 22185. 350.—5/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

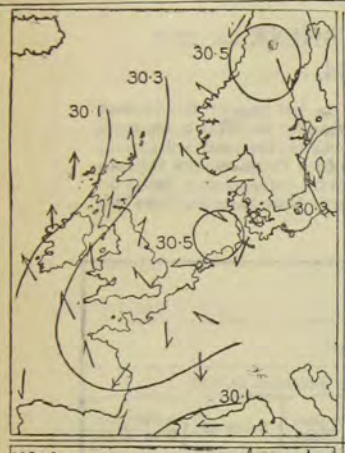
Weather

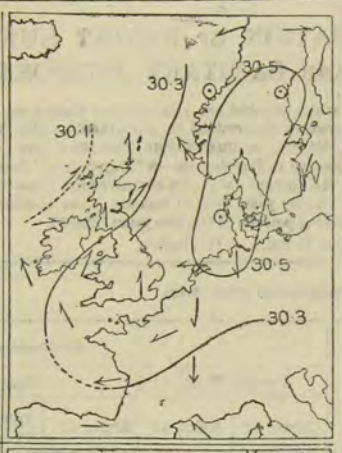
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, May 4.

Weather dull and rainy in Ireland, but fine elsewhere. Rain extending to several of our northern stations later.

Temperature risen at all but the Irish and western French stations; readings over our Islands ranging from 57° at Nairn and Shields and 55° at Scilly to 47° at Sumburgh Head and Yarmouth. Slight ground frost occurring over England at night.

Wind Northerly in Sweden and the east of France and Easterly over the Bay of Biscay, but South-Easterly or Southerly in our Islands; strong in force on our west and north-west coasts, but light or moderate elsewhere.

Sea rough on our extreme south-west, west, and north-west coasts.

Barometer rising at all but our extreme western and northern stations. Long anticyclonic band extending from Scandinavia to the north-east of France, with a depression lying off the west of Scotland. Depression moving northwards later, and barometer rising again in west.

Wednesday, May 5.

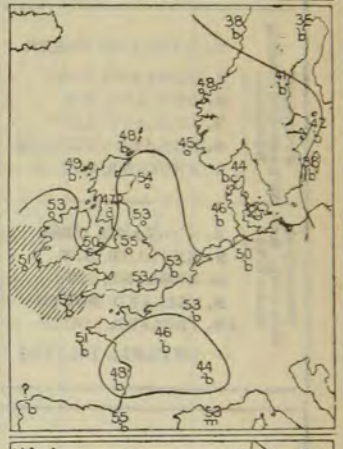
Weather dull and rainy at several of our western and northern stations, but generally fine elsewhere. Thunder heard at Wick in night.

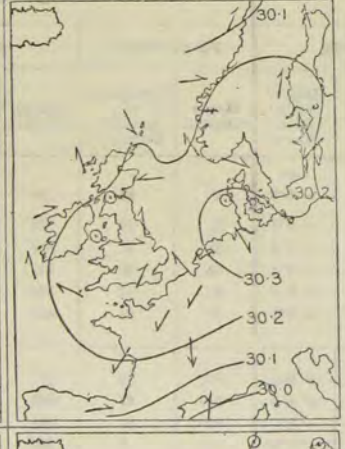
Temperature fallen slightly over Great Britain; readings ranging from 55° at Nairn, York, Liverpool, and Cambridge to 47° at Ardrossan. Subsequently rising to 69° at Oxford, 71° at Loughborough and in London, and 72° at Cambridge.

Wind light Easterly over the Channel and west of France, but light or moderate from the Southward on our western and northern coasts.

Sea rather rough at Valencia and Scilly; slight or smooth elsewhere.

Barometer rising at all but the northern Scandinavian stations. General distribution of pressure very similar to that of previous day. Slight fall occurring in all places later.





Thursday, May 6.

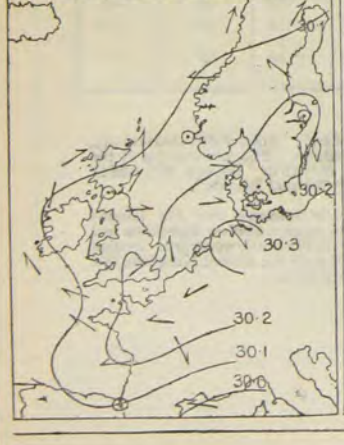
Weather cloudy at several of our northern stations, with showers at Stornoway, but generally fine elsewhere. Slight rain falling later on many parts of our northern coasts.

Temperature fallen in the northern parts of Scotland and Ireland, but risen elsewhere; readings ranging from 61° at Shields and Cambridge to 47° at Sumburgh Head. Highest maxima 75° at Cambridge, 74° in London, and 73° at York and Loughborough.

Wind light Southerly in Scandinavia and Easterly over the Channel and Bay of Biscay, but variable in most other localities. No important change later.

Sea rather rough at Scilly, slight or smooth elsewhere.

Barometer falling generally. Large but irregularly formed anticyclone lying over the greater part of Western Europe, with shallow depressions off the west of Scotland and the north-east of England. Fall continuing all day.



Friday, May 7.

Weather foggy in Norway and the Shetlands, and dull in Ireland and the west of Scotland, but generally fine elsewhere. Slight rain falling at many of our western stations later.

Temperature fallen slightly in central England, and the east of Scotland, but risen elsewhere; readings ranging from 62° at Cambridge and 61° at Shields, Liverpool and in London to 46° in the Shetlands. Subsequently rising to 73° at York and Oxford, 74° at Cambridge, 75° at Loughborough, and 76° in London.

Wind light Easterly over the Channel and Bay of Biscay, and South-Easterly on our extreme south-west coasts, but variable or South-Westerly in the north. Subsequently shifting to North-East in Scotland.

Sea rather rough at Scilly, slight or smooth elsewhere.

Barometer still falling generally. No important change in distribution of pressure, but anticyclone of previous day becoming greatly reduced both in size and intensity. Low pressure area subsequently appearing off our south-west coast.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

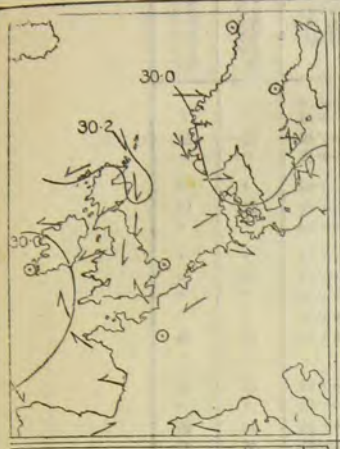
Weather

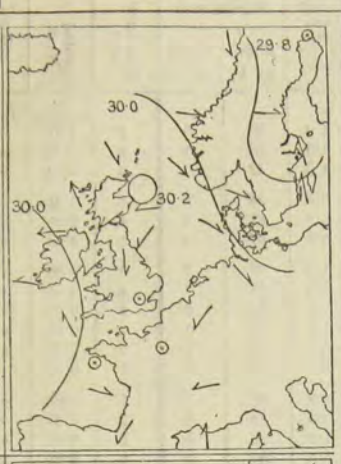
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, May 8.

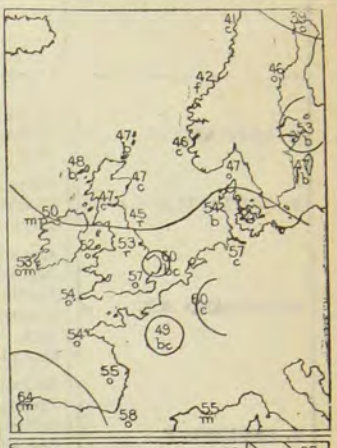
Weather fine in the north of Scotland and extreme south-east of England as well as at many of the Continental stations, but dull elsewhere, with rain in the north of England and some parts of Ireland. Bright aurora seen in the north of Scotland at night.

Temperature risen a little over the Netherlands, but fallen elsewhere; readings ranging from 61° at Cambridge to 44° at Wick. Highest maxima 71° in London and at Oxford, 70° at Cambridge, and 67° at Loughborough.

Wind light from East or South-East on our western and southern coasts, but Northerly in the north and north-east and variable in the south-east.

Sea moderate to smooth.

Barometer falling at all but our extreme northern stations. Anticyclone still lying over France and the Netherlands, but new high pressure system appearing over our northern coasts with relatively low pressures over Scandinavia and the south-west of our Islands.



Sunday, May 9.

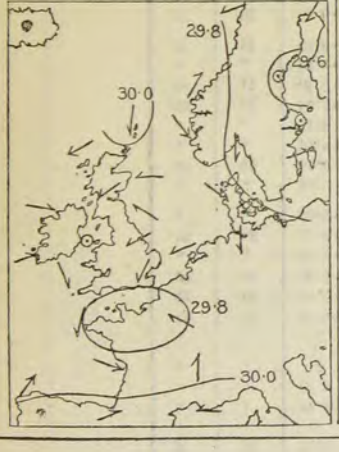
Weather fine at our south-eastern and many of the Continental stations, but dull elsewhere, with rain in the north of Ireland and some parts of England. Rain falling in Scotland later.

Temperature fallen a little in the north and east, but risen slightly in the west; readings ranging from 59° at Prawle Point to 41° at Nairn. Highest maxima 71° in London and at Cambridge, 68° at Hurst Castle and Oxford, and 66° at Loughborough.

Wind fresh North-Westerly on the eastern shores of the North Sea, but light Easterly or South-Easterly in our Islands, and variable in the east of France. Subsequently shifting to West in the west of Ireland.

Sea moderate to smooth.

Barometer falling a little in most places. Band of high pressure extending from our extreme northern coasts to the north-east of England, with low readings over Sweden and Spain. Fall subsequently becoming more decided in France.



Monday, May 10.

Weather fine in the south-east of England, as well as at many of the Scandinavian and Danish stations, but dull elsewhere, with rain in the west of France, and also in the northern parts of Ireland and England.

Temperature changed irregularly; readings ranging from 64° at Jersey to 42° at several of our northern stations.

Wind North-Westerly on the eastern shores of the North Sea, and Easterly on our north and east coasts, but Westerly over the Bay of Biscay and west of Ireland; light or moderate in force generally.

Sea smooth generally.

Barometer falling at all but the southern French stations. Pressure still highest in the extreme north of Scotland, with shallow areas of low pressures over the Gulf of Bothnia and north of France. Rise taking place on our west and south-west coasts later.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

ERRATA.—In the Summaries of Temperature, Rainfall, &c. given on pages 65 and 69, under the heading of *Rainfall*, since December 29, 1885, Difference from Mean—Inches, for the figures printed, read as follows:—

DISTRICTS.	For Week ended April 26 (p. 65). Difference from Mean.	For Week ended May 3 (p. 69). Difference from Mean.	DISTRICTS.	For Week ended April 26 (p. 65). Difference from Mean.	For Week ended May 3 (p. 69). Difference from Mean.
	Ins.	Ins.		Ins.	Ins.
0. SCOTLAND, NORTH	0·0	− 0·1	**6.** SCOTLAND, WEST	+ 1·0	+ 0·8
1. SCOTLAND, EAST	− 0·6	− 0·7	**7.** ENGLAND, N.W.	+ 1·5	+ 1·2
2. ENGLAND, N.E.	+ 0·4	+ 0·1	**8.** ENGLAND, S.W.	− 0·8	− 1·2
3. ENGLAND, E.	− 0·8	− 1·1	**9.** IRELAND, NORTH	+ 1·0	+ 0·9
4. MIDLAND COUNTIES	+ 0·2	0·0	**10.** IRELAND, SOUTH	+ 0·2	+ 0·3
5. ENGLAND, SOUTH	− 0·8	− 0·9	CHANNEL ISLANDS	0·0	− 0·2

III.—DATA from which the SUMMARY on page 73 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	54	33	49·0	40·1	44·3	− 1·0	24	5	5	0·37	−0·03	*	*
	Stornoway	53	36	51·0	40·3	45·3	− 1·0	30	5	4	0·18	−0·42	28	25
	Wick	64	31	56·0	40·0	47·5	+ 1·5	47	6	3	0·18	−0·17	*	*
1. SCOTLAND, E.	Nairn	61	35	55·3	41·6	48·0	− 0·6	44	1	4	0·31	−0·06	*	*
	Aberdeen	68	36	57·3	43·7	50·1	+ 2·0	57	0	4	0·44	−0·01	21	19
	Leith	69	41	57·4	44·7	50·7	+ 0·7	61	0	5	0·52	+0·14	*	*
2. ENGLAND, N.E.	Alnwick Castle	65	38	55·1	43·4	48·9	+ 1·5	48	0	6	0·38	−0·12	*	*
	Durham	74	40	59·8	43·3	51·1	+ 3·2	64	0	4	0·64	−0·16	19	18
	Shields	64	40	55·3	44·9	49·8	+ 1·7	55	0	4	0·36	−0·06	*	*
	Scarborough ℍ	65	41	57·0	44·8	50·5	+ 1·9	60	0	4	0·52	+0·10	*	*
	York	73	41	62·0	44·0	52·5	+ 2·6	74	0	5	0·81	+0·41	25	23
	Spurn Head	62	43	55·7	45·1	50·1	+ 1·4	57	0	3	0·25	?	*	*
3. ENGLAND, E.	Hillington ℍ	74	38	67·8	43·6	55·1	+ 4·5	92	0	2	0·09	−0·33	43	41
	Yarmouth	60	41	54·3	44·6	49·2	− 2·0	50	0	1	0·06	−0·35	*	*
	Geldeston	71	32	63·6	42·0	52·2	+ 1·9	71	0	1	0·04	−0·34	50	48
	Cambridge	75	33	71·0	43·4	56·4	+ 4·5	100	0	1	0·05	−0·35	40	38
	Rothamsted	74	?33	68·5	?42·7	?53·8	+?3·9	?83	0	1	0·11	−0·26	*	*
	Ingatestone	72	35	66·2	41·9	53·3	+ 0·9	80	0	1	0·05	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	77	42	64·1	44·9	53·9	+ 3·3	83	0	4	0·48	+0·06	32	30
	Loughborough	75	41	69·4	46·4	57·2	+ 6·5	106	0	1	0·15	−0·28	*	*
	Leicester	74	40	68·4	46·0	56·5	+ 6·9	102	0	1	0·11	−0·34	36	34
	Cheadle ℍ	70	41	63·6	44·9	53·6	+ 4·5	81	0	3	0·44	−0·08	*	*
	Churchstoke ℍ	73	36	67·6	41·6	53·8	+ 3·7	84	1	3	0·21	−0·21	45	42
	Hereford ℍ	76	36	71·4	43·2	56·5	+ 5·5	102	0	2	0·16	−0·26	*	*
	Cirencester	71	29	67·4	38·9	52·3	+ 1·9	85	9	2	0·04	−0·43	58	55
	Oxford	73	34	68·1	43·4	55·0	+ 4·1	91	0	1	0·04	−0·38	55	52
5. ENGLAND, S.	London†	76	36	69·6	43·7	55·9	+ 4·1	97	0	1	0·03	−0·40	45	43
	Strathfield Turgiss ℍ	74	29	69·3	38·6	53·0	+ 2·9	91	10	1	0·04	−0·33	*	*
	Dungeness	65	40	62·1	44·0	54·4	+ 2·7	87	0	1	0·02	−0·38	*	*
	Hastings (St. Leonard's)	67	42	62·9	47·6	54·8	+ 3·4	90	0	1	0·01	−0·42	68	65
	Southampton	72	34	67·2	42·9	54·3	+ 3·0	86	0	3	0·05	−0·40	58	55
	Hurst Castle	68	39	62·9	45·0	53·4	+ 1·7	80	0	1	0·03	−0·37	*	*
	Stowell ℍ	70	34	65·8	42·3	53·4	+ 2·7	80	0	2	0·02	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	61	38	55·0	45·3	49·9	+ 1·8	55	0	6	0·58	−0·30	*	*
	Glasgow	64	41	54·1	45·3	49·4	+ 1·6	52	0	5	0·59	+0·07	10	9
	Ardrossan	60	42	51·0	44·1	47·3	− 0·6	37	0	5	0·58	+0·07	*	*
	Douglas (Isle of Man)	63	36	55·9	43·7	49·4	+ 1·2	52	0	5	0·48	+0·03	20	19
7. ENGLAND, N.W.	Newton Reigny (Penrith)	69	38	58·1	41·6	49·4	+ 1·7	53	1	4	0·29	−0·13	23	21
	Barrow-in-Furness	63	43	57·9	46·0	51·6	+ 1·5	67	0	4	0·57	+0·15	*	*
	Stonyhurst	67	42	59·7	44·9	51·9	+ 2·5	69	0	4	0·96	+0·49	37	35
	Blackpool ℍ	64	37	59·7	42·7	50·7	+ 0·1	61	0	4	0·70	+0·28	27	25
	Manchester	70	44	62·7	46·3	54·0	+ 3·8	84	0	4	0·66	+0·16	*	*
	Liverpool Obs? (Bidston)	68	45	62·9	47·4	54·7	+ 3·9	89	0	3	0·84	+0·46	*	*
	Llandudno ℍ	65	46	61·2	47·9	54·2	+ 3·3	85	0	3	0·45	+0·06	26	25
	Holyhead	64	44	59·7	47·1	53·0	+ 1·7	77	0	2	0·23	−0·19	*	*
8. ENGLAND, S.W.	Llandovery	74	32	71·0	41·7	55·5	+ 4·0	96	1	2	0·02	−0·60	*	*
	Pembroke	60	44	56·4	46·0	50·9	+ 0·1	62	0	2	0·08	−0·37	38	36
	Arlington (N. Devon)	69	38	65·9	43·7	54·1	+ 3·7	85	0	2	0·08	−0·60	*	*
	Cullompton ℍ	71	31	67·9	39·3	52·7	+ 1·1	86	8	2	0·06	−0·45	49	47
	Falmouth	63	44	59·0	47·3	52·8	+ 1·6	76	0	2	0·08	−0·57	59	57
	Plymouth	68	38	64·9	45·1	54·4	+ 2·0	87	0	2	0·05	−0·45	62	60
	Prawle Point	64	42	60·1	46·6	53·0	+ 2·0	77	0	1	0·04	?	*	*
9. IRELAND, N.	Malin Head	61	44	54·7	46·1	50·1	+ 1·4	57	0	3	0·36	?	*	*
	Londonderry	68	45	61·3	47·4	53·9	+ 4·5	83	0	5	0·53	0·00	*	*
	Mullaghmore	66	46	58·3	48·6	53·2	+ 2·7	78	0	4	0·37	−0·16	*	*
	Belmullet	62	48	57·4	50·3	53·6	+ 3·8	81	0	4	0·38	?	*	*
	Markree Castle	66	40	58·6	46·3	52·1	+ 1·9	71	0	6	0·28	−0·21	10	9
	Brookeborough	67	43	58·2	46·9	52·2	+ 2·1	71	0	3	0·63	?	*	*
	Armagh	66	46	58·9	47·5	52·9	+ 3·0	76	0	4	0·56	+0·09	8	8
	Donaghadee	61	39	52·6	43·7	47·9	− 1·8	41	0	5	0·72	+0·24	*	*
	Edgeworthstown	66	43	58·6	46·1	52·0	+ 1·3	70	0	2	0·34	−0·18	*	*
10. IRELAND, S.	Dublin	67	44	59·9	47·7	53·4	+ 3·0	80	0	5	0·86	+0·41	14	13
	Parsonstown	68	44	61·4	47·9	54·3	+ 3·8	86	0	2	0·24	−0·26	7	7
	Kilkenny	64	35	59·1	45·3	51·8	+ 1·1	69	0	4	0·37	−0·07	*	*
	Waterford	62	40	58·1	46·1	51·7	+ 0·4	68	0	4	0·24	−0·32	*	*
	Roche's Point	59	42	56·3	46·9	51·3	− 0·1	65	0	4	0·32	−0·41	*	*
	Valencia	62	49	57·9	50·6	54·0	+ 3·1	84	0	5	1·08	+0·39	16	15
	Killarney	67	48	59·9	49·9	54·6	+ 3·6	88	0	2	0·24	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	59	47	57·4	48·6	52·7	+ 0·9	75	0	4	0·18	−0·23	*	*
	Jersey (Noirmont)	72	43	66·3	49·9	57·6	+ 5·4	109	0	1	0·07	−0·33	69	67

Stations marked ℍ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 20.] *New Series.* WEEK ENDING MONDAY, 17TH MAY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 80.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	32	40·4	37·1	42·9	4 below.	27	14	204	− 74	658	+153
	1. SCOTLAND, EAST	58	35	50·9	38·0	44·0	4 below.	31	11	312	− 79	734	+192
	2. ENGLAND, N.E.	59	35	49·1	39·4	44·0	6 below.	25	7	282	−117	697	+215
	3. ENGLAND, EAST	61	35	52·5	41·2	46·5	5 below.	35	2	403	−125	750	+244
	4. MIDLAND COUNTIES	63	33	52·4	40·6	46·1	5 below.	35	4	440	−120	720	+217
	5. ENGLAND, SOUTH	63	37	55·1	45·0	49·8	3 below.	55	0	460*	−137	590*	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	57	35	50·2	39·6	44·5	4 below.	28	7	290	−149	578	+180
	7. ENGLAND, N.W.	60	34	49·4	40·3	44·6	7 below.	25	5	348	−107	612	+229
	8. ENGLAND, S.W.	62	32	54·6	44·8	49·4	3 below.	52	0	448	−162	490	+257
	9. IRELAND, NORTH	56	32	50·2	39·6	44·6	6 below.	28	7	384	−132	491	+142
	10. IRELAND, SOUTH	60	33	53·1	43·0	47·8	4 below.	41	0	481	−173	397	+158
	— CHANNEL ISLANDS	59	44	55·3	47·3	51·0	2 below.	63	0	540	−145	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 80.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	9	5 more.	101	+12	13·4	+ 0·1	61	54	501	+ 44	32	+ 3
	1. SCOTLAND, EAST	6	7	3 more.	83	+12	8·4	− 0·4	40	35	452	− 55	29	− 3
	2. ENGLAND, N.E.	6	12	8 more.	86	+16	10·1	+ 1·0	15	13	358	− 83	23	− 5
	3. ENGLAND, EAST	7	15	11 more.	78	+ 6	8·2	− 0·3	14	13	445	−102	28	− 6
	4. MIDLAND COUNTIES	7	33	29 more.	78	+10	12·5	+ 2·7	15	14	401	− 85	25	− 5
	5. ENGLAND, SOUTH	6	16	12 more.	73	+ 7	10·0	− 0·1	19	17	450	− 60	28	− 4
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	17	14 more.	85	+ 6	16·9	+ 2·1	29	26	380	− 89	24	− 5
	7. ENGLAND, N.W.	6	19	14 more.	83	+11	14·5	+ 2·8	22	20	382	− 87	24	− 5
	8. ENGLAND, S.W.	6	19	13 more.	84	+ 9	15·6	− 0·3	26	24	455	−109	28	− 7
	9. IRELAND, NORTH	6	19	14 more.	87	+ 1	14·9	+ 2·3	23	21	352	−144	22	− 9
	10. IRELAND, SOUTH	7	18	12 more.	85	+ 3	17·0	+ 1·5	23	21	410	−148	26	− 9
	— CHANNEL ISLANDS	6	4	1 more.	98	+16	11·9	− 0·5	30	29	583	− 94	37	− 5

General Remarks.

Weather has been in an exceedingly unsettled condition in all parts of the Kingdom; unusually heavy and continuous rain has fallen over the inland parts of England and large amounts (in all other districts. In some localities hail, sleet, or snow has been experienced.

Temperature has been below the mean, the deficit ranging from 2° in the "Channel Islands" and 3° in "England, S." to as much as 5° in "England, E." and the "Midland Counties", 6° in "England, N.E." and "Ireland, N." and 7° in "England, N.W." The highest of the maxima, which were generally recorded on the 17th, varied between 55° and 58° in Scotland, 56° and 60° in Ireland, and 59° and 63° in England. During the earlier part of the time the daily maxima over northern England and the greater part of Ireland were exceptionally low for the season; thus, at Barrow-in-Furness the thermometer on the 12th did not rise above 39°, and at Parsonstown and Edgeworthstown 40°. The lowest of the minima, which were registered between the 13th and 15th, ranged from 32° in "Scotland, N.", "England, S.W.", and "Ireland, N.", to 37° in "England, S." and to 44° in the "Channel Islands".

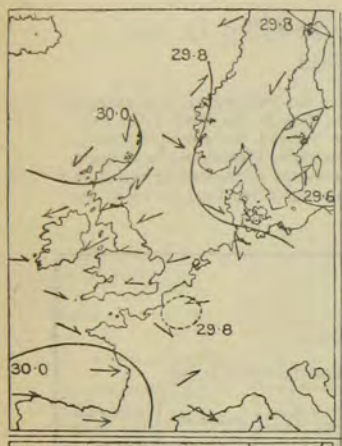
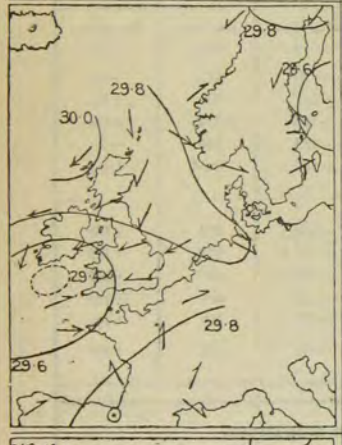
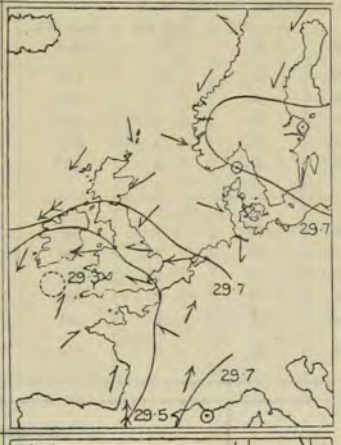
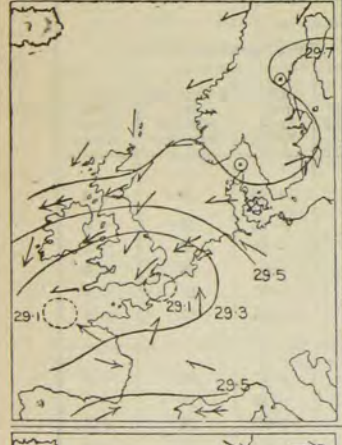
Rainfall has exceeded the mean in all districts; in the "Midland Counties" the fall has been eight times as much as the normal amount and in most other districts three or four times as much. By far the greater portion of this fall occurred between the 11th and 13th, when 4·83 inches were measured at Churchstoke, 4·36 ins. at Hereford, 4·15 ins. at Pershore, 3·38 ins. at Ross (Herefordshire), and 3·44 ins. at Fassaroe (co. Wicklow, Ireland).

Bright sunshine shows an increase in Ireland and Scotland, but a decided decrease over England; the percentages of the possible amount of duration ranged from 13 in "England, N.E." and "England, E." to 35 in "Scotland, E." and 54 in "Scotland, N."

Depressions observed.—During the earlier part of this period two high pressure areas were shown, one off our northern coasts and the other over France, while in the intervening region depressions appeared from the westward, bringing strong Easterly or North-Easterly and subsequently Northerly winds or gales to almost all parts of our coasts, and the heavy falls of rain noted above. By the 16th the northern high pressure area had given way and a depression was skirting our north-western coasts in a north-easterly direction, causing fresh or strong South-Westerly winds over our Islands. At the close of the period a rather deep disturbance appeared off the north of Ireland, and the winds over the United Kingdom blew strongly or with the force of a gale from the South-Westward or Southward.

* These figures have been altered somewhat owing to the receipt of some arrears of observation.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. PRESSURE AND WIND. 8 a.m.	Synoptic Charts. PRESSURE AND WIND. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. TEMPERATURE AND WEATHER at 8 a.m.
		**Tuesday, May 11.** *Weather* fine in Denmark, the south of Scandinavia, and the north of Scotland, but dull elsewhere, with heavy rain in many parts of England and Ireland. *Temperature* fallen a little in most places; readings over our Islands ranging from 54° at Scilly to 41° at Nairn, Leith, and Malin Head. *Wind* North-Westerly on the eastern shore of the North Sea as well as over France and our south-west coasts, but Easterly or North-Easterly elsewhere; light or moderate in force generally. *Sea* moderate to smooth. *Barometer* rising in the north of Scotland, the south-west of our Islands, and the west and north of France, but falling slightly elsewhere. Pressure highest over the Bay of Biscay and the north of Scotland, and lowest over the Baltic, but shallow depressions lying over the west of Ireland and north-east of France. The former of these disturbances subsequently becoming more strongly marked.	
		**Wednesday, May 12.** *Weather* fine in the north and east of Scotland as well as at many of the Continental stations, but heavy rain falling over the greater part of Ireland and England, with snow in some of the northern districts. *Temperature* fallen several degrees in Ireland and the north-west of England, but risen slightly in the east; readings ranging from 54° at Jersey to 39° at Stornoway and Parsonstown. Maxima very low for time of year. *Wind* moderate from South over the Channel and greater part of France, but strong Easterly or North-Easterly on all our more northern coasts, with a fresh gale at Mullaghmore and Belmullet. *Sea* rough off the west of Ireland and rather rough in the Irish Sea, but moderate to smooth elsewhere. *Barometer* falling generally. Pressure highest off the north-west of Scotland, with a well-marked depression off our south-west coasts. Fall continuing all day, and fresh shallow disturbances appearing over the Channel and north of France.	
		**Thursday, May 13.** *Weather* fair in the Shetlands and Hebrides as well as at the Scandinavian and some of our south-western stations, but cloudy and unsettled elsewhere. Heavy rain continuing over the greater part of England and Ireland, and thunder heard at Jersey. *Temperature* little changed; readings ranging from 55° at Scilly to 39° at Barrow-in Furness and 37° at Parsonstown. *Wind* Westerly over the Bay of Biscay and some parts of the Channel, but North-Easterly elsewhere; strong to gale on our east and north-west coasts. Gales moderating later. *Sea* rough on most parts of our eastern and western coasts. *Barometer* falling generally. Pressure highest to the northward of our Islands, and trough of low readings, with three distinct minima lying over our southern coasts. Low pressure system subsequently moving slowly north-eastwards, and slight rise of barometer taking place in west and south.	
		Friday, May 14. *Weather* fair at many of our western and southern stations, but rain still falling in the north of England, and showers in some other localities. Improvement subsequently taking place over north of England, but showers falling locally. *Temperature* risen a few degrees in the west, but fallen elsewhere; readings ranging from 50° at Dungeness and Yarmouth to 38° at Wick. *Wind* fresh South-Westerly over France, the Netherlands, and the extreme south-east of England, but Easterly in the south of Norway, and strong from the Northward on our own western and northern coasts. Subsequently shifting to the Northward at our south-eastern stations. *Sea* rough or rather so on our eastern and many parts of our western coasts. *Barometer* falling in Scandinavia and Scotland, but rising elsewhere. Low pressure system of previous day lying over our east and south-east coasts in morning, but subsequently moving northwards to North Sea.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

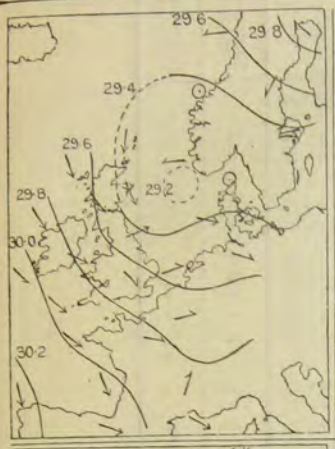
Weather

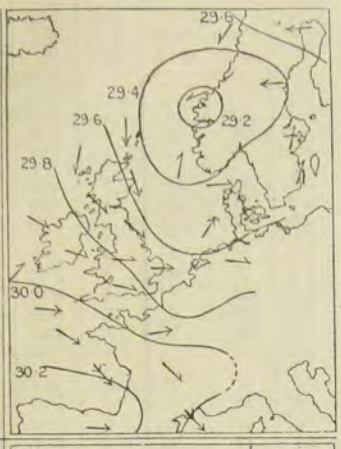
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, May 15.

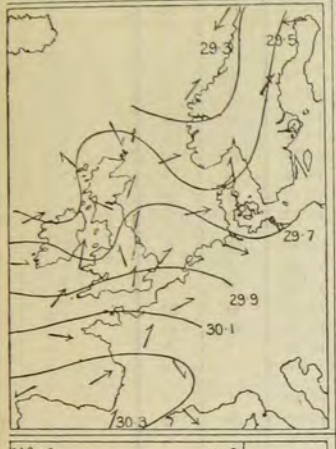
Weather rainy in the north and east of Scotland as well as at some of the Norwegian and Swedish stations, but fair or fine elsewhere. Cold showers falling later in many parts of the Kingdom, and lunar halos seen over the south of England at night.

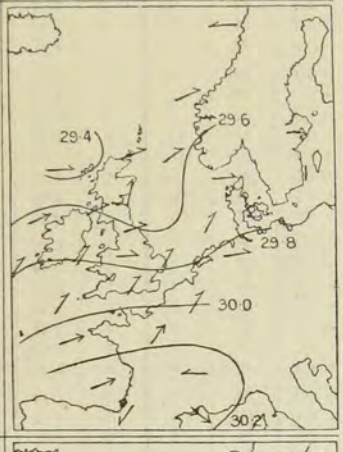
Temperature changed irregularly; readings ranging from 51° at Valencia to 41° at Wick.

Wind North-Westerly over the United Kingdom and France, but Westerly in the Netherlands and Easterly in Scandinavia; moderate in force on all our more southern coasts, but strong in the north, with a fresh gale in the east of Scotland. Subsequently backing to West and South-West on our extreme western coasts.

Sea rough on our north-west, north, and north-east coasts as well as at Scilly.

Barometer falling in the southern parts of Scandinavia, but rising elsewhere. Low pressure system of Thursday and Friday continuing to move northwards along the west coast of Norway. New fall of barometer commencing in west of Ireland later.





Sunday, May 16.

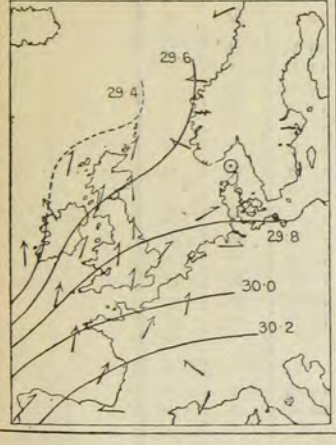
Weather fine in the north and east of Scotland, but cloudy elsewhere, with rain in nearly all parts of England as well as in the north of Ireland. Rain ceasing later. Lunar halo seen in London and lunar corona at Mullaghmore at night.

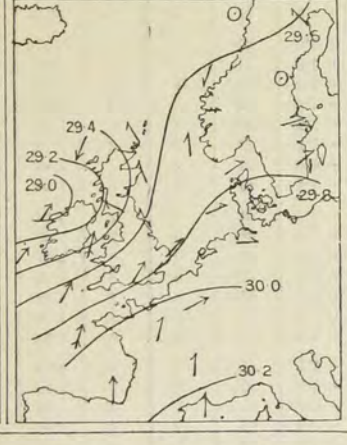
Temperature fallen a little on the eastern shores of the North Sea, but risen elsewhere; readings over our Islands ranging from 53° at Roche's Point to 42° at Ardrossan.

Wind South-Easterly in the west and south of Scotland, but South-Westerly or Westerly in most other localities; strong in force at several of our western and southern stations. Subsequently veering to South-West in Scotland.

Sea rather rough on our south and south-west coasts.

Barometer rising at all but our western and northern stations where brisk fall reported. Anticyclone lying over Spain and the south of France, with depression off our north-west coasts. Depression moving northwards later.





Monday, May 17.

Weather fine at several of our northern stations, but cloudy or overcast elsewhere, with rain in many parts of Ireland and England. Rainy weather extending to Scotland later.

Temperature risen a little in most places; readings ranging from 54° at Valencia and 53° at Scilly, Jersey, and in London, to 46° in the Shetlands.

Wind Easterly in the west of Norway, but Southerly or South-Westerly elsewhere; moderate in force in the north and east, but strong in the west and south-west. Subsequently increasing to strong gale on all our western and southern coasts.

Sea rough or rather so in the south and south-west generally.

Barometer rising in the north and east, but falling elsewhere—quickly in Ireland. Depression of previous day passing away to the northward of Scotland, but new and deeper disturbance approaching Ireland. Barometric fall subsequently becoming general, and centre of new system appearing off north of Ireland in evening.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 77 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	49	35	43·3	37·1	42·4	− 3·8	23	14	7	0·89	+0·50	*	*
	Stornoway	54	32	49·3	35·6	42·0	− 5·1	20	18	6	0·69	+0·09	61	54
	Wick	55	36	50·7	38·6	44·3	− 2·4	30	10	6	1·13	+0·77	*	*
1. SCOTLAND, E.	Nairn	57	35	50·4	37·1	43·4	− 4·7	30	14	7	0·55	+0·17	*	*
	Aberdeen	54	35	50·1	37·7	43·4	− 4·3	28	12	6	0·98	+0·56	40	35
	Leith	58	37	52·3	39·1	45·3	− 4·5	35	8	4	0·45	+0·08	*	*
2. ENGLAND, N.E.	Alnwick Castle	57	37	48·7	40·3	44·3	− 4·0	23	5	5	0·91	+0·42	*	*
	Durham	59	35	48·9	36·7	42·4	− 6·5	25	15	6	1·06	+0·58	16	14
	Shields	55	36	48·9	39·0	43·7	− 5·2	25	8	6	0·47	+0·07	*	*
	Scarborough ℳ	58	37	49·0	39·8	44·1	− 5·5	24	6	7	2·30	+1·89	*	*
	York	57	36	51·0	39·1	44·7	− 6·4	31	8	6	1·43	+1·03	13	12
	Spurn Head	55	39	47·9	41·7	44·6	− 5·5	19	1	7	1·05	?	*	*
3. ENGLAND, E.	Hillington ℳ	60	36	51·1	40·4	45·4	− 5·1	31	4	7	1·34	+0·92	9	8
	Yarmouth	59	38	52·3	41·7	46·7	− 4·9	34	1	7	1·24	+0·82	*	*
	Geldeston	61	37	52·8	41·3	46·7	− 4·7	36	2	7	1·14	+0·76	17	16
	Cambridge	61	36	53·1	40·7	46·5	− 5·9	37	4	7	2·07	+1·67	15	14
	Rothamsted	59	35	52·6	41·5	46·7	− 5·7	35	1	7	1·86	+1·40	*	*
	Ingatestone	61	37	53·0	41·7	47·0	− 5·9	36	1	6	1·57	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	61	37	50·6	40·4	45·2	− 6·1	29	4	7	3·39	+2·97	14	13
	Loughborough	61	37	51·6	41·1	46·0	− 5·5	32	3	7	2·79	+2·35	*	*
	Leicester	62	37	53·0	41·0	46·6	− 5·1	36	3	7	2·38	+1·93	11	10
	Cheadle ℳ	57	36	48·9	38·4	43·3	− 6·9	24	10	7	3·42	+2·90	*	*
	Churchstoke ℳ	58	33	52·3	38·1	44·8	− 5·9	36	11	7	4·99	+4·57	21	19
	Hereford ℳ	63	34	54·4	42·0	47·8	− 4·1	41	0	7	4·58	+4·15	*	*
	Cirencester	61	? 36	55·1	? 40·0	? 47·1	? − 4·5	? 44	? 6	6	2·53	+2·07	17	16
	Oxford	58	38	52·9	43·6	48·0	− 3·9	42	0	7	2·54	+2·13	13	12
5. ENGLAND, S.	London†	59	38	54·3	43·3	48·5	− 5·4	46	0	7	1·76	+1·37	12	11
	Strathfield Turgiss ℳ	63	37	56·9	44·0	50·1	− 1·9	57	0	7	1·64	+1·29	*	*
	Dungeness	58	40	54·3	46·1	50·0	− 2·6	56	0	7	1·55	+1·15	*	*
	Hastings (St. Leonard's)	57	39	54·5	45·9	49·9	− 2·4	55	0	5	1·54	+1·12	30	28
	Southampton	61	38	56·3	45·7	50·7	− 1·6	61	0	6	1·42	+0·98	14	13
	Hurst Castle	63	40	55·7	45·9	50·3	− 2·3	58	0	7	1·30	+0·92	*	*
	Stowell ℳ	58	37	53·9	44·4	48·9	− 2·5	48	0	6	2·03	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	52	35	49·7	40·1	44·6	− 4·3	26	5	4	1·28	+0·40	*	*
	Glasgow	54	37	51·2	39·2	44·8	− 3·8	31	8	4	0·76	+0·24	24	21
	Ardrossan	52	37	49·9	39·6	44·4	− 4·5	27	7	5	0·60	+0·10	*	*
	Douglas (Isle of Man)	57	33	49·9	39·3	44·3	− 4·7	27	8	6	4·18	+3·76	33	30
7. ENGLAND, N.W.	Newton Reigny (Penrith)	54	34	47·9	37·0	42·1	− 6·6	22	14	7	1·37	+0·94	16	14
	Barrow-in-Furness	54	36	49·7	41·0	45·1	− 5·8	26	3	6	2·35	+1·92	*	*
	Stonyhurst	55	34	48·2	38·0	42·8	− 7·9	22	11	6	1·38	+0·76	21	19
	Blackpool ℳ	56	37	50·1	40·8	45·2	− 6·5	27	3	6	2·00	+1·56	23	21
	Manchester	57	37	49·2	39·8	44·2	− 7·2	25	6	7	1·72	+1·17	*	*
	Liverpool Obsy (Bidston)	58	38	50·6	41·1	45·6	− 6·1	29	3	6	2·13	+1·75	*	*
	Llandudno ℳ	60	37	49·4	41·8	45·2	− 6·9	23	1	5	2·26	+1·86	27	25
	Holyhead	57	39	50·4	42·6	46·3	− 5·4	30	0	6	1·90	+1·48	*	*
8. ENGLAND, S.W.	Llandovery	61	32	56·1	42·4	48·8	− 3·1	48	0	7	3·66	+3·05	*	*
	Pembroke	53	41	51·0	45·3	48·0	− 3·6	42	0	7	1·69	+1·25	30	28
	Arlington (N. Devon)	59	36	53·4	42·9	47·8	− 3·3	41	0	6	2·39	+1·73	*	*
	Cullompton ℳ	62	38	56·3	45·2	50·4	− 2·0	59	0	6	1·96	+1·49	18	17
	Falmouth	60	42	55·2	46·1	50·4	− 1·7	59	0	7	1·23	+0·61	29	27
	Plymouth	62	42	57·4	47·6	52·2	− 1·1	71	0	5	1·04	+0·58	26	25
	Prawle Point	55	38	53·0	44·1	48·3	− 3·3	44	0	6	1·11	?	*	*
9. IRELAND, N.	Malin Head	54	35	50·0	39·9	44·7	− 4·5	28	6	6	0·75	?	*	*
	Londonderry	55	37	51·4	39·5	45·1	− 5·1	32	7	7	0·89	+0·35	*	*
	Mullaghmore	54	37	49·6	41·7	45·4	− 6·0	25	1	6	1·27	+0·70	*	*
	Belmullet	55	39	49·6	42·9	46·1	− 4·6	29	0	7	2·02	?	*	*
	Markree Castle	55	36	49·9	39·4	44·3	− 6·9	27	7	7	2·11	+1·65	22	20
	Brookeborough	56	33	50·5	38·0	43·9	− 7·1	30	11	5	2·75	?	*	*
	Armagh	56	32	?52·2	?37·0	?44·1	−?6·7	?36	?14	5	2·30	+1·86	24	22
	Donaghadee	56	37	48·7	39·3	43·7	− 6·5	23	8	6	2·70	+2·22	*	*
	Edgeworthstown	56	33	50·3	38·3	43·9	− 7·3	29	10	5	2·01	+1·49	*	*
10. IRELAND, S.	Dublin	59	36	52·9	41·9	47·1	− 4·1	36	0	7	3·14	+2·61	31	28
	Parsonstown	58	33	51·6	40·9	45·9	− 5·6	32	3	7	1·46	+0·96	18	17
	Kilkenny	58	35	54·0	42·6	48·0	− 3·5	42	0	6	1·13	+0·71	*	*
	Waterford	60	37	55·3	43·7	49·2	− 3·1	50	0	7	1·38	+0·86	*	*
	Roche's Point	58	40	54·1	44·1	48·8	− 3·7	48	0	7	1·62	+0·93	*	*
	Valencia	56	38	52·6	44·7	48·4	− 3·3	45	0	7	1·49	+0·84	20	19
	Killarney	56	36	51·5	43·0	47·0	− 4·5	35	0	7	2·22	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	59	44	54·9	47·4	50·9	− 1·8	62	0	6	0·40	+0·03	*	*
	Jersey (Noirmont)	58	45	55·6	47·1	51·1	− 2·1	64	0	5	0·45	+0·06	30	29

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 21.] *New Series.* WEEK ENDING MONDAY, 24TH MAY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 84.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	65	35	* 54·0	41·1	47·2	0 (average).	40	3	244	− 83	661	+153
	1. SCOTLAND, EAST	64	34	57·1	42·3	49·3	0 (average).	51	0	363	− 95	734	+191
	2. ENGLAND, N.E.	65	36	55·7	44·3	49·6	1 below.	53	0	335	−133	697	+215
	3. ENGLAND, EAST	70	41	62·1	47·1	54·1	2 above.	85	0	488	−120	750	+243
	4. MIDLAND COUNTIES	66	38	58·9	46·0	52·1	1 above.	71	0	511	−130	720	+216
	5. ENGLAND, SOUTH	69	41	61·0	49·5	54·9	2 above.	90	0	550	−134	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	67	36	55·2	42·9	49·2	1 below.	50	0	340	−167	578	+180
	7. ENGLAND, N.W.	62	35	56·7	45·8	50·9	1 below.	62	0	412*	−117	612	+229
	8. ENGLAND, S.W.	67	36	58·9	47·6	52·9	0 (average)	76	0	524	−197	490	+257
	9. IRELAND, NORTH	69	34	57·2	42·6	49·4	2 below.	52	0	436	−147	491	+141
	10. IRELAND, SOUTH	67	35	58·0	43·4	50·4	3 below.	59	0	540	−190	397	+158
	— CHANNEL ISLANDS	63	47	57·6	49·2	53·1	1 below.	78	0	618	−152	202	+109

	DISTRICTS. (See p. 84.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	5	1 more.	105	+12	13·9	+ 0·2	42	36	543	+ 40	32	+ 3
	1. SCOTLAND, EAST	5	12	8 more.	88	+14	9·6	+ 0·4	44	38	496	− 65	30	− 3
	2. ENGLAND, N.E.	4	4	0 (average)	90	+17	10·5	+ 0·9	18	16	376	−127	22	− 7
	3. ENGLAND, EAST	4	8	4 more.	82	+ 7	9·0	0·0	42	38	487	−120	29	− 6
	4. MIDLAND COUNTIES	5	9	5 more.	83	+11	13·4	+ 3·1	12	11	413	−124	24	− 7
	5. ENGLAND, SOUTH	6	11	7 more.	79	+ 8	11·1	+ 0·6	27	25	477	− 86	28	− 5
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	8	3 more.	89	+ 6	17·7	+ 2·5	38	33	418	−102	25	− 5
	7. ENGLAND, N.W.	5	9	5 more.	88	+13	15·4	+ 3·3	27	24	409	−114	24	− 6
	8. ENGLAND, S.W.	5	8	2 more.	89	+10	16·4	− 0·1	27	25	482	−130	28	− 8
	9. IRELAND, NORTH	3	4	1 less.	90	− 1	15·3	+ 2·2	49	43	401	−136	24	− 7
	10. IRELAND, SOUTH	4	8	2 more.	89	+ 3	17·8	+ 1·8	45	41	455	−148	27	− 8
	— CHANNEL ISLANDS	6	14	10 more.	104	+18	13·3	+ 0·5	21	20	604	−130	35	− 8

General Remarks.

Weather has been dull, unsettled, and very rainy in England and Scotland, but in Ireland the conditions have been somewhat fairer. Thunder and lightning have occurred at many of our southern and south-eastern stations, that experienced in the Metropolis during the early morning of the 22nd being unusually severe.

Temperature has about equalled its normal value in the north and east of Scotland and the south-west of England, and has been 1° or 2° above it in "England, E.", the "Midland Counties", and "England, S.", but a little below in all other districts. The highest of the maxima, which were generally registered on the 21st, ranged from 62° in "England, N.W.", to 69° in "England, S." and "Ireland, N." and 70° in "England, E." The lowest of the minima, which were recorded on irregular dates, varied from 34° in the north of Ireland and in the east of Scotland, to 41° in "England, E." and "England, S.", and to 47° in the "Channel Islands".

Rainfall has been slightly less than the mean in "Ireland, N." and equal to it in "England, N.E.", but more in all other districts. In the east of Scotland, the "Channel Islands", and in the neighbourhood of London the excess has been considerable.

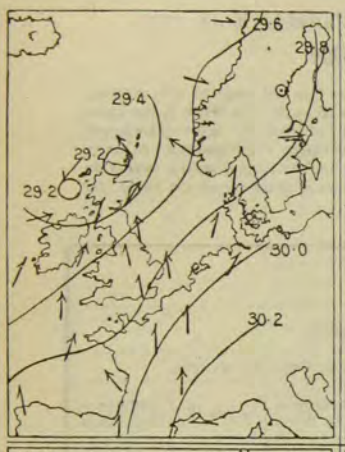
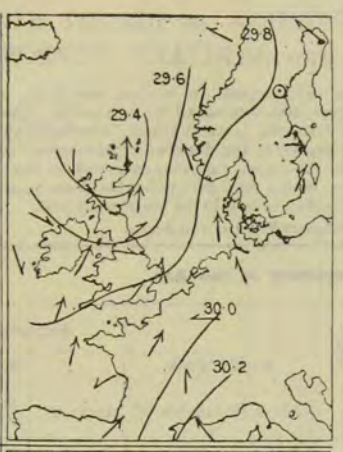
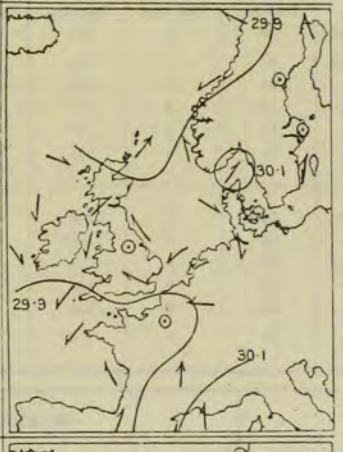
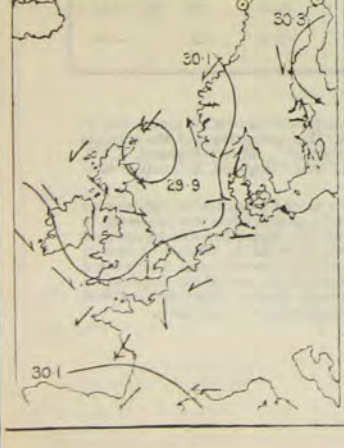
Bright sunshine has been more prevalent than it was last week in most places, but in some parts of England it has again been very deficient. The percentages of the possible amount of duration ranged from 11 in the "Midland Counties", 16 in "England, N.E.", and 20 in the "Channel Islands", to 38 in "Scotland, E." and "England, E.", and to 43 in "Ireland, N."

Depressions observed.—At the commencement of the period a depression was moving north-eastwards over the north of Scotland, and the wind in our Islands was moderate to strong from the southward. By the morning of the 20th this disturbance had dispersed over Norway, but a well defined depression was shown near Scilly, whence it moved directly over the United Kingdom in a north-north-easterly direction and disappeared over Lapland on the 22nd. From this time until the close of the period the distribution of pressure over our Islands was rather irregular, but several shallow depressions existed in different localities, causing heavy rains and occasional thunder and lightning.

* This value has been altered slightly owing to an error in the Llandudno values for last week.

E 22357. 350.—5/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, May 18.** *Weather* fine in France and fair over the greater part of the United Kingdom, but rainy in the south of Norway and also at Prawle Point. Showers falling later at many of our stations, and solar halo seen at Hurst Castle and Jersey. *Temperature* fallen a little in the south-west, but risen elsewhere; readings ranging from 58° at Yarmouth and 57° in London to 45° in the Shetlands. Subsequently rising to 68° at Cambridge and 69° in London. *Wind* South-Easterly in the Shetlands and the south of Norway and North-Easterly in the Hebrides, but Southerly or South-Westerly elsewhere; fresh or strong in force on all but our extreme western and northern coasts. Subsequently veering to North-West in western parts of Ireland and Scotland. *Sea* rough of rather so on our south-west coasts generally, as well as at Sumburgh Head. *Barometer* rising in Ireland and Scotland, but falling elsewhere. Pressure high in the south-east of France, but large area of low readings with two minima lying over our northern coasts. Low pressure system moving northwards later, and barometer rising generally.	
		**Wednesday, May 19.** *Weather* fair or fine in most places, but rain falling in some parts of Sweden and passing showers at Stornoway. Rain setting-in at our extreme southern stations later, thunder occurring at Cambridge, and lightning seen at Jersey. *Temperature* changed rather irregularly; readings ranging from 56° at Aberdeen and 55° at several of the English stations to 46° in the Shetlands. *Wind* moderate Westerly or South-Westerly at all our more northern stations, but Easterly or South-Easterly in France and the south of England. Subsequently backing to North-East in the extreme south. *Sea* rather rough at the mouth of the Channel and also at Sumburgh Head. *Barometer* rising at all but the southern French stations. Low pressure area of previous day passing away to the northward of our Islands, but shallow depressions appearing over the Bay of Biscay and France. Slight fall taking place in south of England later.	
		Thursday, May 20. *Weather* rainy over the western, northern, and central parts of England, and foggy in the south-west, but fair or fine elsewhere. Rain falling later in nearly all parts of the Kingdom, heavily in the north. Thunder heard at Jersey during day. *Temperature* risen a little in the south-east of England, but fallen elsewhere; readings ranging from 56° at Jersey and 55° at Dungeness and in London to 45° at Donaghadee. *Wind* light or moderate from the Southward over the greater part of the Channel, but Easterly on our east coasts and North-Easterly and Northerly in the west and south-west. Subsequently veering to South-West in the south. *Sea* rather rough at Valencia, slight or smooth elsewhere. *Barometer* falling over England, the Netherlands, and the north of France, but rising elsewhere. Pressure still highest in the south-east of France, but anticyclonic band extending from Sweden to the east coast of Scotland, and small depression lying near Scilly. Depression subsequently moving steadily in a north-north-easterly direction.	
		**Friday, May 21.** *Weather* dull and rainy in Scotland and also in the south-west of France, but fair or fine elsewhere. Becoming thundery in south of England at night. *Temperature* risen a little in Ireland, and also over the eastern and central parts of England, but fallen elsewhere; readings ranging from 58° in London and at Cambridge to 43° at Stornoway and Wick. Subsequently rising to 69° at Cambridge and 68° in London. *Wind* North-Westerly in the west and north and South-Westerly in the south-east of our Islands, but North-Easterly in the west of France, light or moderate in force generally. Subsequently becoming variable on our southern coasts. *Sea* rather rough at Valencia, moderate to smooth elsewhere. *Barometer* falling a little in the north of Scotland and also in the south-west of France, but rising elsewhere. Depression of previous day now lying between the Scotch and Norwegian coasts, but new disturbance advancing northwards over France.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

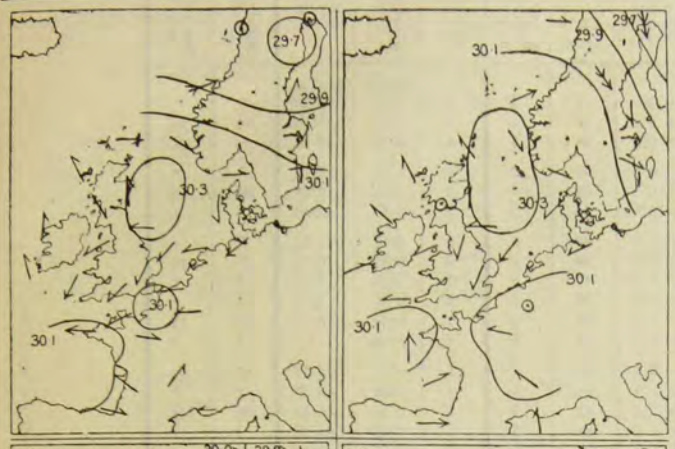
Weather

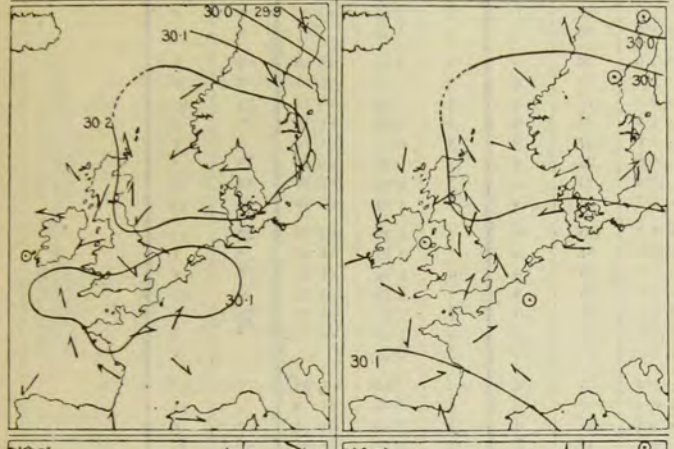
During the 24 hours succeeding 8 a.m. on the dates given.

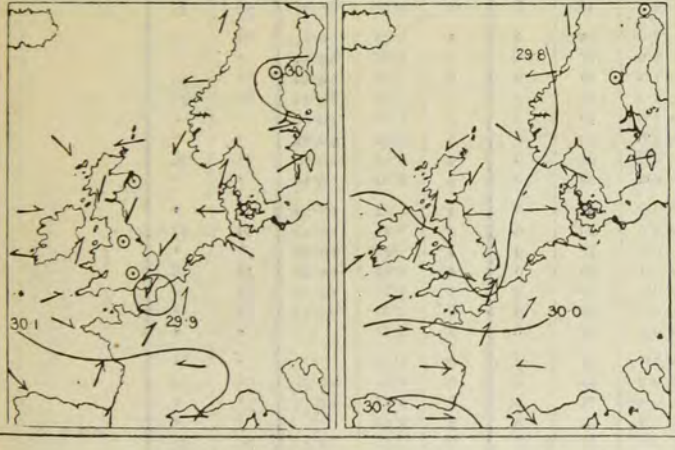
Synoptic Charts.

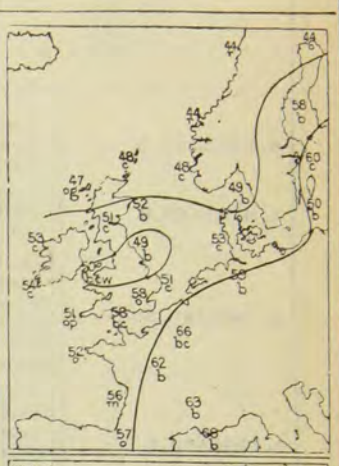
TEMPERATURE AND WEATHER

at 8 a.m.









Saturday, May 22.

Weather rainy over central England as well as in the west of Norway, but fair or fine in most other localities. Severe thunderstorm with heavy rain and hail experienced in London during early morning.

Temperature fallen on the eastern shores of the North Sea and also in the east of England; readings over our Islands ranging from 58° in London to 47° at Stornoway and Spurn Head.

Wind Westerly in the south of Scandinavia, but North-Easterly in England and the north of France and South-Easterly or Southerly on our western and northern coasts; light or moderate in force generally.

Sea moderate to smooth.

Barometer falling briskly in Sweden and slightly over the south of England and north of France, but rising elsewhere. Large anticyclone now lying over the North Sea and the greater part of our Islands, with shallow depressions over the Bay of Biscay and north-east of France. Slight fall taking place over the United Kingdom later.

Sunday, May 23.

Weather **fine** in Scandinavia and Denmark as well as on **our north** and east coasts, but dull elsewhere, with **rain at** some of the English stations, and thunder at Cambridge and Helder. Some improvement taking place in south of England later.

Temperature changed irregularly; readings ranging from 58° at Jersey to 45° at Loughborough.

Wind light Easterly on the eastern shores of the North Sea and South-Easterly on our western and northern coasts, but Northerly at our eastern and central stations, and variable in the south.

Sea slight or smooth on all coasts.

Barometer falling slightly at all but the Scandinavian stations. Anticyclone lying over the south of Scandinavia and the northern part of the North Sea, and long band of relatively low pressure extending from the Netherlands across the Channel coasts to the south of Ireland. Low pressure area subsequently moving slowly northwards.

Monday, May 24.

Weather fine at some of the Scandinavian stations, but cloudy elsewhere, with fog or mist in many places, and rain locally. Heavy rain falling in London all day, the total amount measured next morning being 1·2 ins.

Temperature risen a little over central England and also on the eastern shores of the North Sea, but fallen elsewhere; readings ranging from 55° at Scilly, Dungeness, London, and Cambridge to 46° in the Shetlands.

Wind Easterly on the eastern shores of the North Sea, North-Easterly on the south coast of England, and Westerly or South-Westerly in France, but very variable elsewhere. Subsequently shifting to the Westward on our southern coasts.

Sea slight or smooth on all coasts.

Barometer falling generally. Pressure high in Scandinavia and Spain, with a large area of relatively low readings over our Islands and the North Sea, and a small shallow depression off the south-east of England. Depression subsequently moving slowly northwards.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 81 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	52	40	50·3	41·7	45·7	− 1·4	27	1	5	0·64	+0·25	*	*
	Stornoway	65	35	56·0	41·0	48·1	+ 0·2	47	3	2	0·06	−0·54	42	36
	Wick	58	36	55·6	40·7	47·7	+ 0·1	45	4	4	0·83	+0·46	*	*
1. SCOTLAND, E.	Nairn	60	34	57·0	41·3	48·7	− 0·8	50	2	6	1·31	+0·92	*	*
	Aberdeen	64	38	56·4	42·6	49·1	+ 0·4	50	0	5	1·01	+0·58	44	38
	Leith	63	38	58·0	42·9	50·0	− 0·8	56	0	3	1·20	+0·82	*	*
2. ENGLAND, N.E.	Alnwick Castle	60	37	54·1	43·4	48·4	− 1·0	45	0	2	0·32	−0·16	*	*
	Durham	65	36	57·9	42·9	50·0	− 0·6	56	0	3	0·35	−0·12	23	20
	Shields	62	39	54·1	43·9	48·7	− 1·2	47	0	3	0·24	−0·16	*	*
	Scarborough ℳ	62	42	54·5	44·8	49·4	− 1·3	52	0	5	0·51	+0·09	*	*
	York	63	38	58·1	44·6	51·0	− 1·4	63	0	5	0·69	+0·30	12	11
	Spurn Head	61	44	55·6	45·9	50·3	− 1·2	58	0	3	0·35	?	*	*
3. ENGLAND, E.	Hillington ℳ	69	41	63·7	45·7	54·2	+ 2·8	85	0	4	0·53	+0·11	37	33
	Yarmouth	64	46	58·4	48·1	52·9	+ 0·9	76	0	1	0·06	−0·35	*	*
	Geldeston	70	44	64·8	47·1	55·4	+ 2·6	94	0	2	0·16	−0·23	46	42
	Cambridge	69	44	62·3	46·9	54·1	+ 1·2	85	0	5	1·01	+0·61	?	?
	Rothamsted	66	42	60·5	47·1	53·4	+ 0·4	80	0	6	1·67	+1·20	*	*
	Ingatestone	68	42	62·8	47·6	54·7	+ 2·2	89	0	5	1·46	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	63	41	59·0	44·7	51·4	− 1·0	66	0	6	0·87	+0·43	9	8
	Loughborough	66	44	59·4	46·3	52·5	− 0·4	74	0	6	1·42	+0·97	*	*
	Leicester	64	44	60·1	46·7	53·0	+ 0·4	77	0	6	1·23	+0·78	13	12
	Cheadle ℳ	60	42	56·6	44·8	50·4	− 1·4	59	0	6	0·63	+0·10	*	*
	Churchstoke ℳ	61	38	57·3	43·7	50·1	− 1·7	57	0	5	0·55	+0·12	8	7
	Hereford ℳ	64	44	60·0	47·3	53·3	+ 0·2	79	0	3	0·68	+0·24	*	*
	Cirencester	61	43	59·1	46·4	52·4	− 0·5	73	0	5	0·84	+0·38	13	12
	Oxford	62	45	59·6	48·4	53·7	+ 0·7	82	0	5	1·21	+0·79	16	15
5. ENGLAND, S.	London†	69	46	63·6	49·9	56·3	+ 2·0	100	0	5	2·18	+1·78	22	20
	Strathfield Turgiss ℳ	67	41	62·7	48·1	55·0	+ 2·6	91	0	7	1·22	+0·86	*	*
	Dungeness	62	47	60·0	49·7	54·5	+ 1·0	88	0	5	1·00	+0·60	*	*
	Hastings (St. Leonard's)	65	48	62·5	50·4	56·1	+ 2·5	99	0	7	0·77	+0·36	39	36
	Southampton	67	46	61·5	50·3	55·6	+ 2·1	95	0	7	1·12	+0·67	20	18
	Hurst Castle	63	47	58·1	49·9	53·8	+ 0·5	83	0	7	1·11	+0·73	*	*
	Stowell ℳ	65	45	58·7	48·2	53·1	+ 1·2	78	0	6	0·47	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	67	36	57·7	43·0	49·9	+ 0·4	55	0	4	0·68	−0·22	*	*
	Glasgow	65	38	57·2	42·4	49·4	− 0·2	52	0	3	0·64	+0·10	36	31
	Ardrossan	63	38	55·1	42·7	48·5	− 1·6	46	0	4	0·64	+0·14	*	*
	Douglas (Isle of Man)	58	33	54·8	43·5	48·8	− 1·3	48	0	5	1·13	+0·70	40	35
7. ENGLAND, N.W.	Newton Reigny (Penrith)	60	35	56·1	42·3	48·8	− 1·0	48	0	6	1·23	+0·81	28	25
	Barrow-in-Furness	62	42	57·6	47·0	52·0	0·0	70	0	5	0·97	+0·55	*	*
	Stonyhurst	61	38	56·7	44·9	50·5	− 1·4	60	0	6	1·13	+0·53	21	19
	Blackpool ℳ	61	35	56·5	46·0	50·9	− 2·1	62	0	3	0·88	+0·45	28	25
	Manchester	62	42	58·6	45·9	51·9	− 0·9	69	0	7	1·20	+0·67	*	*
	Liverpool Obsy (Bidston)	62	41	56·9	47·4	51·9	− 1·0	69	0	5	0·64	+0·24	*	*
	Llandudno ℳ	59	41	56·2	46·4	51·0	− 2·2	63	0	4	0·68	+0·29	31	28
	Holyhead	60	44	54·9	46·6	50·3	− 2·2	58	0	4	0·60	+0·18	*	*
8. ENGLAND, S.W.	Llandovery	67	36	62·1	45·9	53·5	+ 0·8	81	0	4	0·82	+0·20	*	*
	Pembroke	61	45	54·3	47·0	50·4	− 2·0	59	0	6	0·91	+0·46	26	24
	Arlington (N. Devon)	63	44	59·3	46·3	52·4	0·0	73	0	5	0·90	+0·22	*	*
	Cullompton ℳ	66	46	61·6	48·7	54·7	+ 1·1	89	0	4	0·94	+0·46	16	15
	Falmouth	62	46	58·4	48·2	53·0	− 0·1	77	0	6	0·70	+0·08	41	38
	Plymouth	64	48	59·6	49·5	54·3	+ 0·1	86	0	3	0·56	+0·10	23	21
	Prawle Point	62	45	57·1	47·6	52·2	− 0·2	71	0	5	0·57	?	*	*
9. IRELAND, N.	Malin Head	64	43	53·9	44·3	47·8	− 2·1	41	0	3	0·21	?	*	*
	Londonderry	69	35	61·2	42·7	51·4	+ 0·2	66	0	3	0·34	−0·21	*	*
	Mullaghmore	65	45	56·9	48·0	52·2	− 0·4	71	0	2	0·73	+0·13	*	*
	Belmullet	61	38	55·0	44·9	49·7	− 1·7	54	0	3	0·49	?	*	*
	Markree Castle	64	34	57·7	39·1	47·8	− 4·5	53	8	3	0·74	+0·27	53	47
	Brookeborough	64	35	59·5	40·6	49·5	− 2·6	58	4	1	0·31	?	*	*
	Armagh	62	37	58·6	41·6	49·6	− 2·1	55	1	4	0·29	−0·16	44	39
	Donaghadee	58	35	53·3	42·3	47·5	− 3·4	39	0	4	0·70	+0·22	*	*
	Edgeworthstown	63	34	59·0	40·3	49·1	− 2·4	57	5	3	0·16	−0·36	*	*
10. IRELAND, S.	Dublin	62	41	57·2	45·5	51·0	− 1·4	63	0	4	0·92	+0·49	46	41
	Parsonstown	67	36	57·9	42·1	49·5	− 3·0	53	0	5	0·80	+0·30	39	35
	Kilkenny	64	35	58·7	43·1	50·4	− 2·1	59	0	4	1·17	+0·74	*	*
	Waterford	63	37	57·9	43·7	50·4	− 3·1	59	0	4	1·02	+0·60	*	*
	Roche's Point	60	42	56·1	44·3	49·9	− 3·8	55	0	4	0·43	−0·27	*	*
	Valencia	60	41	58·6	44·9	51·3	− 1·2	65	0	3	0·16	−0·50	51	46
	Killarney	65	35	59·5	39·9	49·1	− 3·4	59	6	4	0·73	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	47	57·1	48·1	52·3	− 1·4	72	0	4	0·32	−0·06	*	*
	Jersey (Noirmont)	63	44	58·0	50·3	53·9	− 0·6	83	0	7	2·43	+2·03	21	20

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 22.] *New Series.* WEEK ENDING MONDAY, 31ST MAY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 88.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	32	51·3	39·3	44·9	4 below.	32	8	276	−101	669	+161
	1. SCOTLAND, EAST	59	35	53·8	41·9	47·5	4 below.	39	0	402	−126	734	+191
	2. ENGLAND, N.E.	63	36	54·9	43·0	48·6	4 below.	46	0	382*	−159	697	+215
	3. ENGLAND, EAST	68	37	60·9	45·2	52·5	2 below.	74	0	562	−130	750	+243
	4. MIDLAND COUNTIES	70	35	59·0	42·8	50·4	4 below.	59	0	570	−154	721 *	+217
	5. ENGLAND, SOUTH	68	37	59·6	46·3	52·6	2 below.	74	0	624	−152	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	59	34	52·9	41·5	46·9	4 below.	36	1	376	−204	579	+181
	7. ENGLAND, N.W.	62	31	54·5	42·5	48·1	6 below.	43	0	455	−151	612	+229
	8. ENGLAND, S.W.	69	32	57·7	43·9	50·4	4 below.	59	0	583	−193	490	+257
	9. IRELAND, NORTH	63	29	54·4	41·5	47·6	5 below.	41	1	477	−181	492	+142
	10. IRELAND, SOUTH	65	33	56·5	40·4	47·9	6 below.	48	4	588	−223	401	+162
	— CHANNEL ISLANDS	64	42	57·8	47·5	52·4	3 below.	73	0	691	−168	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 88.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	6	2 more.	112	+15	14·5	+ 0·3	26	22	569	+ 25	32	+ 2
	1. SCOTLAND, EAST	4	15	11 more.	92	+15	11·1	+ 1·5	31	26	527	− 91	29	− 5
	2. ENGLAND, N.E.	4	9	4 more.	94	+18	11·4	+ 1·4	29	25	405	−143	22	− 8
	3. ENGLAND, EAST	4	4	0 (average).	86	+ 8	9·4	0·0	57	51	538 †	−125	30	− 6
	4. MIDLAND COUNTIES	6	11	6 more.	89	+14	14·5	+ 3·7	42	37	455	−132	25	− 7
	5. ENGLAND, SOUTH	5	9	5 more.	84	+12	12·0	+ 1·1	49	44	526	− 89	29	− 5
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	6	1 more.	93	+ 6	18·4 *	+ 2·6	32	28	450	−122	25	− 6
	7. ENGLAND, N.W.	5	14	9 more.	93	+15	16·8	+ 4·2	42	37	451	−124	25	− 6
	8. ENGLAND, S.W.	5	7	1 more.	94	+11	17·1	+ 0·1	59	53	541	−122	30	− 6
	9. IRELAND, NORTH	4	5	1 less.	94	0	15·8	+ 2·1	36	32	437	−152	24	− 8
	10. IRELAND, SOUTH	5	6	0 (average).	94	+ 5	18·4	+ 1·8	57	51	512	−139	28	− 8
	— CHANNEL ISLANDS	6	11	7 more.	110	+20	14·4	+ 1·2	53	49	657	−138	36	− 8

General Remarks.

Weather has continued in an unsettled condition over the whole Kingdom, with a good deal of rain in some localities, and occasional thunder and lightning. In Ireland and England, however, several fine intervals have been experienced.

Temperature has been below the mean in all districts, the deficit ranging between 2° and 4° in Scotland and most parts of England, to 5° in "Ireland, N." and 6° in "England, N.W." and "Ireland, S." The highest of the maxima, which were recorded either on the 30th or 31st in Ireland and England and on various dates in Scotland, ranged from 57° to 59° at the Scotch stations, to 62° or 63° over the northern parts of England and Ireland, to 69° in "England, S.W." and 70° in the "Midland Counties". The lowest of the minima, which were registered on the 27th in Ireland and the north-west of England and on various dates in other parts of the Kingdom, were as low as 29° in "Ireland, N.", 31° in "England, N.W.", and 32° in "Scotland, N." and "England, S.W.", while in the other districts they ranged from 33° in "Ireland, S." to 37° in "England, E." and "England, S." and to 42° in the "Channel Islands".

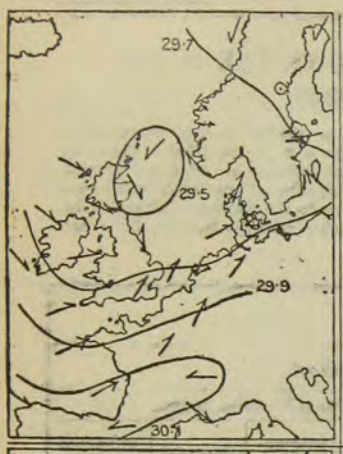
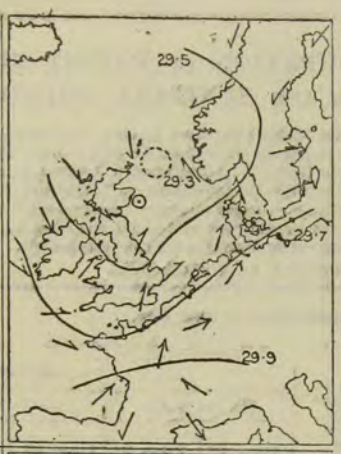
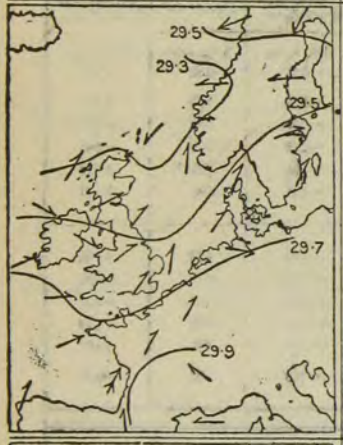
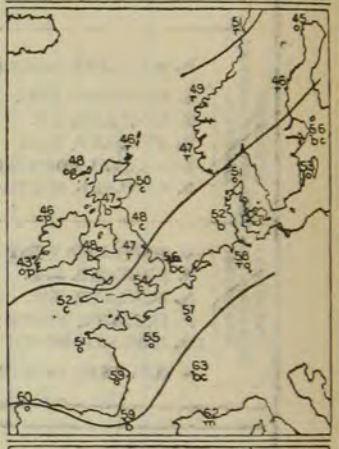
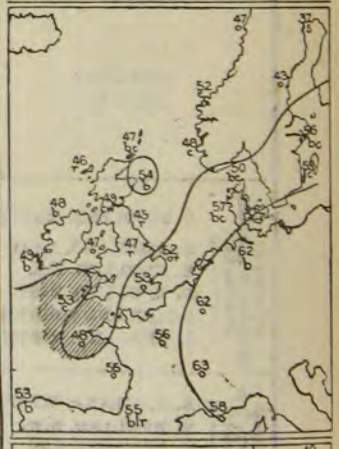
Rainfall has been rather irregularly distributed; in "Scotland, E." and "England, N.W." it has been considerably more than the mean and the excess has been scarcely less marked over central and southern England and in the "Channel Islands", while in "Scotland, W." and "England, S.W." it has only very slightly exceeded the mean value, in "England, E." and "Ireland, S." just equalled it, and in "Ireland, N." a slight deficit is shown.

Bright sunshine has been more prevalent than it was last week excepting in the north and east of Scotland. The percentages of the possible amount of duration varied from 53 in "England, S.W." and 51 in "Ireland, S." and "England, E." to between 22 and 28 in Scotland and the north-east of England.

Depressions observed.—Barometric pressure has been somewhat irregular and favourable for the formation and passage of small shallow disturbance over our Islands. These have consequently been numerous and have generally travelled slowly over the Kingdom in a northerly or north-easterly direction. By the end of the period pressure had become comparatively high over our northern districts, while a depression was advancing towards our south-west coasts from the Bay of Biscay. Light to moderate breezes (at times variable, but chiefly between south and west) prevailed during the greater part of the week, but towards its close they gave way to light Easterly and North-Easterly winds.

* These values have been altered slightly owing to some errors in recent Returns from Scarborough, Bawtry, and Glasgow.
† This value has been altered owing to the receipt of some arrears of observations from Cambridge.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, May 25.** *Weather* fine in the south of France and fair at some of our eastern stations, but cloudy elsewhere, with rain in the west and north of our Islands as well as over the English Channel. Rain falling generally later. *Temperature* risen a few degrees in the west of France, but changed irregularly elsewhere; readings over our Islands ranging from 57° in London to 46° at Sumburgh Head and Malin Head. *Wind* light North-Westerly on our western and northern coasts, but moderate or fresh South-Westerly elsewhere. *Sea* rather rough at Brest and also in the Straits of Dover, but moderate to smooth elsewhere. *Barometer* falling generally. Pressure high over Spain and the south of France, with a large but shallow depression lying between the Scotch and Norwegian coasts. Fall continuing all day.	
		**Wednesday, May 26.** *Weather* rainy in the extreme north and showery at several of our western stations, but fair or fine elsewhere. Heavy thunderstorms occurring over France at night. *Temperature* fallen in most places; readings ranging from 56° at Yarmouth to 41° at Belmullet. *Wind* moderate North-Westerly on our western coasts and North-Easterly in the Shetlands and north of Scandinavia, but South-Westerly elsewhere. Subsequently becoming South-Westerly or Westerly generally. *Sea* moderate to smooth. *Barometer* falling at nearly all stations. Pressure now highest in the south-east of France, with a large and irregularly formed area of low pressure to the northward of our Islands. Slight rise subsequently taking place in east, but fall continuing in west.	
		Thursday, May 27. *Weather* fine at several western and northern stations, and on eastern shores of the North Sea, cloudy or overcast elsewhere, with rain in many parts of England. Improvement over England later, but heavy rain in Scotland. *Temperature* risen a few degrees on eastern shores of North Sea and also in the west of Ireland, fallen elsewhere; readings ranging from 54° at Aberdeen and Dungeness to 45° at Shields. *Wind* varying greatly in different localities. Chiefly North-Easterly in W. and N., South-Easterly on eastern shores of North Sea, South-Westerly to Westerly over France, and variable over England; light or moderate in force generally. Subsequently shifting to South-West in the east and south. *Sea* rather rough at Scilly, moderate to smooth elsewhere. *Barometer* falling except in north. Large area of low pressure extending from Holland to the south-west of our Island, with one depression over the east of England, and another near mouth of the St. George's Channel. System subsequently moving northwards, and barometer rising in south.	
		Friday, May 28. *Weather* rainy in Scotland and showery in the west of Ireland, but fair or fine elsewhere. Showers falling later in most parts of the Kingdom, but some improvement taking place in Scotland. *Temperature* fallen a few degrees in Scotland, but risen slightly elsewhere; readings ranging from 53° at Scilly to 44° at Stornoway. *Wind* varying between East and North in the extreme north of Scotland, but chiefly North-Westerly in Ireland and South-Westerly over England and France; strong in force at some of the more exposed stations. *Sea* rather rough off the north of Scotland and also in the Channel. *Barometer* falling somewhat in the north but rising elsewhere. Depression noticed over the east of England on previous day now lying as a more clearly defined system over the north-east of Scotland. Disturbance subsequently filling up, and barometer rising in north.	

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Saturday, May 29.

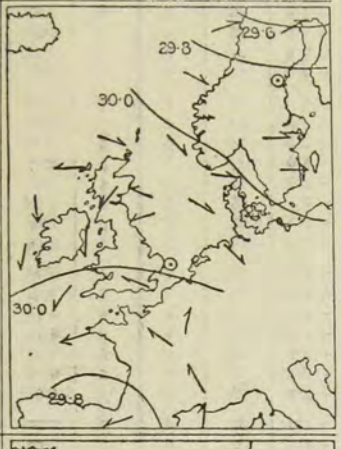
Weather dull in the north with passing showers at Stornoway, but generally fine elsewhere. Thunderstorms experienced in east of England later.

Temperature risen generally; readings ranging from 56° at Scilly and 55° at Yarmouth to 47° at Sumburgh Head, Stornoway, Nairn, and Leith.

Wind North-Westerly or Northerly on our extreme western and northern coasts, but South-Westerly over the greater part of England and Easterly in the south of France; light or moderate in force generally. Subsequently shifting to North-East on our northern coasts.

Sea rather rough at Stornoway, slight or smooth elsewhere.

Barometer rising at all but the southern French stations. Pressure high over the Baltic and relatively high over France, with the remains of the previous day's depression lying off the north and east of Scotland, and a new shallow disturbance off our extreme south-west coasts. Both systems moving north-eastwards later.



Sunday, May 30.

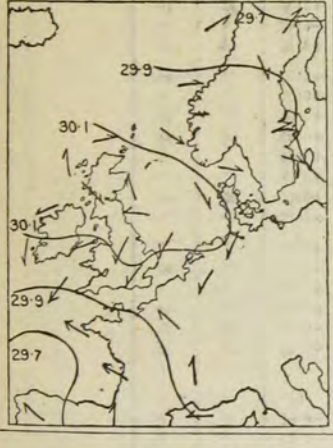
Weather fair on the whole but dull in Norway and Sweden, with rain at Christiansund.

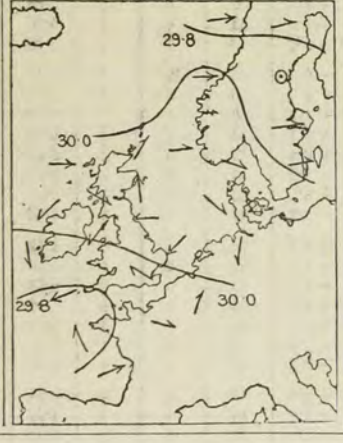
Temperature fallen over the northern part of the Kingdom, but risen in the south; readings ranging from 57° at Dungeness to 43° in the Shetlands. Subsequently rising to 67° at Loughborough, Cambridge, and in London.

Wind North-Easterly or Northerly on our northern coasts and Easterly in the extreme south, but variable in the intermediate localities.

Sea slight or smooth on nearly all coasts.

Barometer rising at all but the Swedish and western French station. Areas of high pressure lying over Scotland and the Netherlands, with low pressure systems over the northern parts of Scandinavia and Spain. Slight fall taking place later at our southern and the French stations.





Monday, May 31.

Weather rainy in the west of France and thundery at Jersey, but fine elsewhere. Rain falling later at several of our southern stations.

Temperature risen in Scotland and France, but fallen elsewhere; readings ranging from 57° at Roche's Point and 56° at Pembroke, Dungeness, and in London to 42° in the Shetlands. Subsequently rising to 65° at Cambridge, and 67° in London.

Wind South-Easterly in France, but Easterly or North-Easterly over the greater part of our Islands, and North-Westerly in Scandinavia and Denmark; light or moderate in force generally.

Sea moderate to smooth.

Barometer rising at all but our extreme southern and the French stations. Anticyclone lying over the North Sea and the north of our Islands, with depression over the Bay of Biscay. Depression subsequently extending northwards, and barometer falling in all parts of the Kingdom.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟫⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 85 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	52	35	48·6	40·4	44·3	− 3·9	23	4	7	0·53	+0·13	*	*
	Stornoway	56	32	51·6	39·6	45·2	− 4·0	32	7	6	0·57	−0·04	26	22
	Wick	57	32	53·6	38·0	45·3	− 3·4	40	11	7	0·77	+0·39	*	*
1. SCOTLAND, E.	Nairn	59	37	53·7	41·3	47·1	− 4·2	39	2	4	1·18	+0·78	*	*
	Aberdeen	59	36	53·9	43·0	48·1	− 2·0	43	0	5	1·67	+1·25	31	26
	Leith	58	35	53·7	41·4	47·2	− 4·9	39	2	3	1·61	+1·21	*	*
2. ENGLAND, N.E.	Alnwick Castle	57	36	51·9	41·3	46·3	− 4·4	33	2	2	1·43	+0·95	*	*
	Durham	61	36	54·7	41·7	47·8	− 4·3	42	1	4	0·78	+0·30	24	21
	Shields	59	40	52·6	41·9	46·9	− 4·2	35	0	4	1·19	+0·79	*	*
	Scarborough ℜ	60	42	55·4	44·1	49·4	− 2·7	52	0	5	0·68	+0·25	*	*
	York	63	41	57·7	43·4	50·1	− 3·5	57	0	5	0·82	+0·41	33	29
	Spurn Head	62	42	57·3	45·4	51·0	− 1·7	63	0	5	0·29	?	*	*
3. ENGLAND, E.	Hillington ℜ	68	39	61·7	44·1	52·4	− 0·4	73	0	5	0·46	+0·01	54	48
	Yarmouth	62	45	59·3	47·6	53·1	− 0·2	78	0	3	0·58	+0·15	*	*
	Geldeston	64	43	61·3	46·1	53·1	− 1·2	78	0	3	0·47	+0·07	64	57
	Cambridge	67	39	62·7	44·1	52·8	− 1·1	76	0	4	0·33	−0·12	53	47
	Rothamsted	64	37	60·0	44·2	51·6	− 3·4	67	0	6	0·55	+0·07	*	*
	Ingatestone	64	41	60·1	45·0	52·1	− 2·6	71	0	4	0·27	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	64	37	58·0	43·0	50·1	− 3·9	57	0	7	0·82	+0·35	34	30
	Loughborough	67	40	60·7	44·3	52·0	− 2·6	70	0	5	0·80	+0·33	*	*
	Leicester	70	41	61·6	43·6	52·1	− 1·9	71	0	5	1·18	+0·70	40	35
	Cheadle ℜ	60	38	56·1	41·3	48·3	− 5·0	47	2	5	1·11	+0·56	*	*
	Churchstoke ℜ	60	36	57·1	39·8	47·9	− 5·2	51	6	6	1·51	+1·06	40	35
	Hereford ℜ	66	39	62·0	43·9	52·4	− 2·0	73	0	5	1·33	+0·86	*	*
	Cirencester	63	35	57·4	41·4	48·9	− 5·5	51	2	6	1·08	+0·60	46	41
	Oxford	63	41	59·4	45·0	51·8	− 2·6	69	0	5	0·68	+0·24	49	44
5. ENGLAND, S.	London†	67	41	62·4	45·9	53·7	− 2·1	82	0	6	0·45	+0·02	41	37
	Strathfield Turgiss ℜ	68	37	62·8	43·7	52·7	− 1·1	75	0	6	1·40	+1·02	*	*
	Dungeness	63	45	57·9	48·6	53·0	− 1·7	77	0	4	0·72	+0·32	*	*
	Hastings (St. Leonard's)	65	46	58·8	48·8	53·5	− 1·6	81	0	5	0·76	+0·36	54	49
	Southampton	66	42	60·6	46·2	53·0	− 2·1	77	0	6	1·27	+0·82	51	46
	Hurst Castle	64	44	57·3	47·7	52·2	− 2·5	71	0	5	0·95	+0·55	*	*
	Stowell ℜ	62	39	57·5	43·0	49·8	− 3·2	55	0	4	0·87	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	54	36	51·4	40·7	45·7	− 4·6	31	4	6	0·80	−0·16	*	*
	Glasgow	57	38	53·3	42·3	47·5	− 3·8	39	0	2	0·65	+0·08	18	15
	Ardrossan	58	37	53·6	43·6	48·3	− 3·4	44	0	3	0·50	−0·02	*	*
	Douglas (Isle of Man)	59	34	53·4	39·4	46·0	− 5·7	39	7	4	0·58	+0·13	46	40
7. ENGLAND, N.W.	Newton Reigny (Penrith)	58	31	52·7	37·2	44·5	− 6·7	38	13	7	2·15	+1·70	40	34
	Barrow-in-Furness	60	40	57·0	43·4	49·8	− 3·6	55	0	5	0·95	+0·51	*	*
	Stonyhurst	58	39	53·0	41·8	47·1	− 6·2	37	1	6	2·64	+1·99	33	29
	Blackpool ℜ	59	37	54·1	42·9	48·2	− 6·1	43	0	5	1·05	+0·59	51	44
	Manchester	58	41	54·1	42·5	48·0	− 6·3	42	0	6	2·21	+1·64	*	*
	Liverpool Obsy (Bidston)	62	41	56·7	44·7	50·3	− 3·9	58	0	4	1·09	+0·67	*	*
	Llandudno ℜ	59	41	54·6	43·1	48·5	− 6·2	46	0	4	0·80	+0·41	45	40
	Holyhead	57	42	53·4	41·6	48·7	− 4·7	47	0	3	0·36	−0·17	*	*
8. ENGLAND, S.W.	Llandovery	69	35	60·7	40·7	50·1	− 3·8	62	4	6	1·59	+0·95	*	*
	Pembroke	60	43	55·1	45·6	50·1	− 3·6	57	0	4	0·40	−0·05	74	66
	Arlington (N. Devon)	59	39	56·4	42·4	49·0	− 4·9	49	0	5	0·86	+0·11	*	*
	Cullompton ℜ	64	32	59·4	41·5	49·9	− 5·0	57	1	5	0·87	+0·37	38	34
	Falmouth	61	40	57·4	44·3	50·5	− 3·9	60	0	5	0·42	−0·21	65	59
	Plymouth	63	44	59·7	47·2	53·1	− 2·1	78	0	3	0·17	−0·30	57	52
	Prawle Point	60	40	55·4	45·4	50·1	− 3·5	57	0	5	0·53	?	*	*
9. IRELAND, N.	Malin Head	53	40	51·1	43·1	46·9	− 4·3	34	0	3	0·08	?	*	*
	Londonderry	63	35	58·4	40·4	48·9	− 3·5	55	4	4	0·34	−0·21	*	*
	Mullaghmore	58	44	55·1	43·6	50·6	− 3·4	60	0	5	0·45	−0·20	*	*
	Belmullet	53	39	51·4	43·4	47·2	− 5·2	36	0	4	0·72	?	*	*
	Markree Castle	60	29	54·6	39·4	46·5	− 7·2	42	7	5	0·56	+0·06	46	40
	Brookeborough	61	32	55·9	40·2	47·6	− 6·2	43	9	4	1·05	?	*	*
	Armagh	59	32	55·3	39·7	47·0	− 6·3	45	6	5	0·35	−0·31	26	23
	Donaghadee	55	37	53·1	41·7	47·1	− 5·3	37	1	4	0·62	+0·14	*	*
	Edgeworthstown	59	33	55·1	39·4	46·8	− 5·5	45	7	3	0·51	−0·06	*	*
10. IRELAND, S.	Dublin	61	37	56·7	42·4	49·1	− 4·6	50	0	4	0·55	+0·12	50	44
	Parsonstown	62	37	56·7	40·3	48·0	− 5·9	49	5	5	0·43	−0·10	47	42
	Kilkenny	63	35	56·4	38·7	47·0	− 6·5	49	9	4	0·40	−0·05	*	*
	Waterford	64	34	57·0	39·5	47·7	− 7·4	50	7	4	0·54	+0·01	*	*
	Roche's Point	63	36	55·7	41·9	48·4	− 6·8	45	0	4	0·48	−0·23	*	*
	Valencia	65	39	56·9	43·9	50·0	− 3·7	56	0	6	0·79	+0·09	75	67
	Killarney	64	33	55·6	36·2	45·3	− 8·3	47	16	6	0·66	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	42	57·3	46·6	51·6	− 3·1	67	0	4	0·50	+0·10	*	*
	Jersey (Noirmont)	64	45	58·3	48·4	53·1	− 2·6	78	0	7	1·61	+1·21	53	49

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 23.] *New Series.* WEEK ENDING MONDAY, 7TH JUNE, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 92.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	63	36	54·2	42·4	47·9	2 below.	41	0	317	−103	669	+159
	1. SCOTLAND, EAST	69	34	59·8	43·0	50·8	2 below.	62	0	464	−125	734	+191
	2. ENGLAND, N.E.	73	36	57·4	43·6	50·1	3 below.	57	0	439	−171	697	+215
	3. ENGLAND, EAST	75	33	63·6	43·5	53·0	3 below.	77	0	639	−141	750	+243
	4. MIDLAND COUNTIES	72	37	63·0	44·6	53·2	2 below.	78	0	648	−160	721	+217
	5. ENGLAND, SOUTH	74	38	64·9	47·8	55·8	0 (average).	97	0	721	−149	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	68	35	58·1	41·6	50·9	2 below.	62	0	438	−213	579	+181
	7. ENGLAND, N.W.*	68	34	59·2	45·7	52·0	3 below.	70	0	525	−158	612	+229
	8. ENGLAND, S.W.	72	37	62·6	48·4	55·0	0 (average).	91	0	674	−190	490	+257
	9. IRELAND, NORTH	70	36	58·6	46·2	52·0	2 below.	70	0	547	−184	492	+142
	10. IRELAND, SOUTH	69	45	60·6	49·4	54·6	1 below.	88	0	676	−217	401	+162
	— CHANNEL ISLANDS	68	47	60·0	50·8	55·1	1 below.	92	0	783	−165	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 92.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	2	3 less.	115	+14	14·7	0·0	41	34	610	+ 19	32	+ 2
	1. SCOTLAND, EAST	2	4	1 less.	94	+14	11·5	+ 1·5	55	45	582	− 74	30	− 4
	2. ENGLAND, N.E.	1	8	3 more.	93	+15	12·2	+ 1·7	39	33	444	−136	23	− 7 *
	3. ENGLAND, EAST	2	2	3 less.	88	+ 6	9·6	− 0·3	63	55	601	−109	31	− 6
	4. MIDLAND COUNTIES	2	7	2 more.	91	+12	15·2	+ 3·9	41	36	496	−125	26	− 6
	5. ENGLAND, SOUTH	2	2	3 less.	86	+ 9	12·2	+ 0·9	60	53	586	− 67	30	− 3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	2	2	3 less.	95	+ 5	18·6	+ 2·3	40	34	490	−123	26	− 6
	7. ENGLAND, N.W.*	2	6	1 more.	95	+13	17·4	+ 4·3	40	34	491	−128	26	− 6
	8. ENGLAND, S.W.	2	4	2 less.	96	+ 9	17·5	− 0·2	36	32	577	−134	30	− 7
	9. IRELAND, NORTH	3	5	1 less.	97	− 1	16·3	+ 2·1	16	14	453	−172	24	− 8
	10. IRELAND, SOUTH	4	4	2 less.	98	+ 4	18·8	+ 1·7	15	13	527	−165	27	− 9
	— CHANNEL ISLANDS	2	1	3 less.	112	+18	14·5	+ 0·9	47	42	704	−139	37	− 6

General Remarks.

Weather was rainy at the commencement of the period, with thunder and lightning in many parts of England, but subsequently became finer than it has been for some time past. In Ireland, however, it remained very dull, though but little rain fell.

Temperature has equalled the mean value in "England, S." and "England, S.W.", but in the other districts it has continued below, the deficit ranging between 1° and 3°. The highest of the maxima, which were recorded on different dates in the various localities, ranged from 63° in "Scotland, N." to 74° in "England, S." and 75° in "England, E." During the early days of the period the maxima in some parts of England were very low for the season; at Shields on the 1st the thermometer only reached 46°, and on the following day 49°, while on the 3rd the temperature at most of the central and eastern English stations did not exceed 53°. The lowest of the minima, which were generally registered between the 3rd and 5th, varied from 33° in "England, E." and 34° in "Scotland, E." and "England, N.W.", to 38° in "England, S.", 45° in "Ireland, S.", and 47° in the "Channel Islands". At Ingatestone the thermometer on the grass during the early morning of the 4th, and again on the 5th, fell to 31°·8.

Rainfall has been rather more than the mean in "England, N.E.", the "Midland Counties", and "England, N.W.", but less elsewhere.

Bright sunshine shows a decrease in Ireland and the extreme western parts of England, but an increase in most other districts; the percentages of the possible amount of duration ranged from between 13 and 15 in Ireland to 32 in "England, S.W.", 45 in "Scotland, E.", 53 in "England, S.", and 55 in "England, E."

Depressions observed.—With the exception of some shallow disturbances which travelled slowly in a north-easterly direction over our Islands at the commencement of the period, no depressions appeared in our immediate neighbourhood. During the latter part of the week the distribution of pressure was anticyclonic, and the winds, which had previously been light or moderate from the Eastward, became more variable in the south, while at our northern stations they shifted to the Westward.

* The values in this district are liable to alteration owing to the non-arrival of the return from Llandudno.

E 22483. 350.—6/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

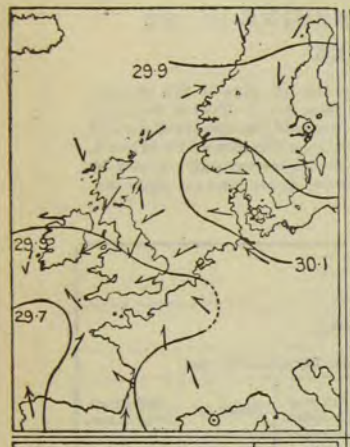
Weather

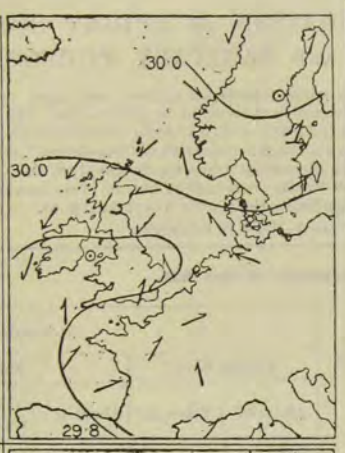
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, June 1.

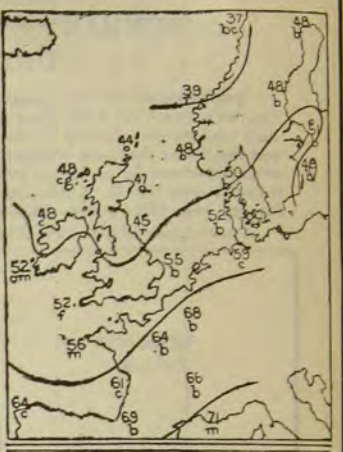
Weather unsettled and rainy over the greater part of England and Ireland, with a thunderstorm at Pembroke, but generally fine elsewhere. Thunderstorms and heavy rain occurring later at many of the English stations.

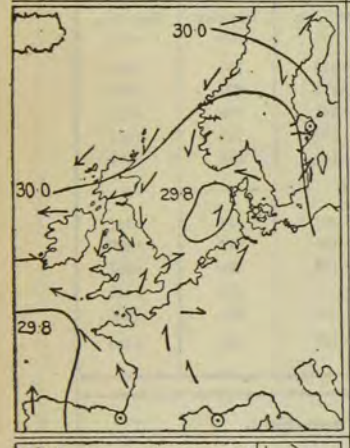
Temperature fallen slightly in the west, but risen elsewhere; readings ranging from 61° at Cambridge to 44° in the Shetlands. Subsequently rising to 71° at Cambridge and 72° in London.

Wind South-Easterly or Southerly at our extreme southern and the French stations, but North-Easterly over the northern parts of the Kingdom, and South-Westerly in the west of Norway. Subsequently veering to South-West on our southern coasts.

Sea moderate to smooth.

Barometer falling at all but the Scandinavian stations. Pressure highest over Denmark and the south of Sweden, but relatively high in the south-east of France, with a large area of low readings to the south-westward of our Islands. Low pressure system subsequently extending north-eastwards over England, and barometer continuing to fall generally.





Wednesday, June 2.

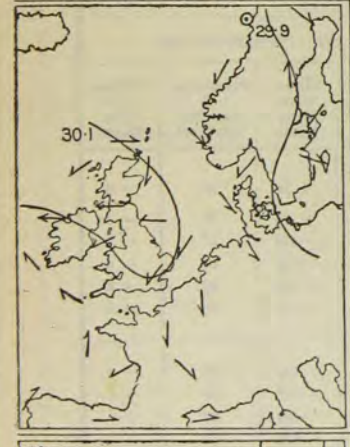
Weather fine in Sweden, the north of Norway, and the south of England, but cloudy elsewhere, with rain in the south of Norway and north-west of France, and showers at some of our own northern stations. Thunderstorms occurring later over the Channel and south of England.

Temperature changed irregularly; readings ranging from 60° at Cambridge to 44° in the Shetlands. Subsequently rising to 72° at Cambridge and 74° in London.

Wind moderate or fresh from the North-Eastward on our northern coasts, but Southerly at most of the French stations, and variable in the south of England. Subsequently shifting to the Eastward in the south of England.

Sea rather rough at Stornoway and Scilly; slight or smooth elsewhere.

Barometer falling generally. Low pressure system of previous day now lying over the North Sea, but new disturbance approaching the north-west of France. Latter system moving eastwards over the Channel later.



Thursday, June 3.

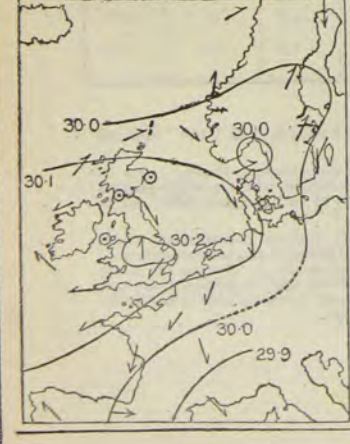
Weather fine at most of our northern and eastern stations, but cloudy or overcast elsewhere, with rain in the west of our Islands, and snow at Bodö. Fair weather extending to our west coasts later.

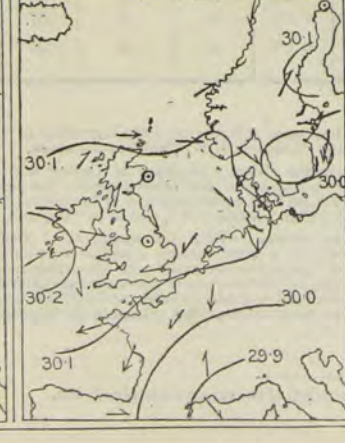
Temperature fallen generally, especially over central England; readings ranging from 56° at Valencia, Scilly, and Jersey, to 45° at Liverpool and 44° in the Shetlands. Maxima over central England from 10° to 18° lower than on previous day.

Wind North-Westerly on the eastern shores of the North Sea, and Easterly in our Islands, but variable in France; light or moderate in force generally. Westerly breezes subsequently appearing in extreme north.

Sea rather rough at Scilly, moderate to smooth elsewhere.

Barometer rising at all but the Swedish stations. Small depression of previous day now passing away towards central Europe, and anticyclone spreading over our Islands. Slight fall taking place in north later.





Friday, June 4.

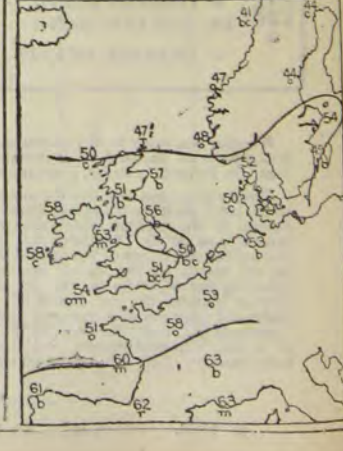
Weather dull and misty on our south-west coasts, and rainy at Sumburgh Head and Biaritz, but fair elsewhere.

Temperature fallen a little in France, but risen elsewhere; readings over our Islands ranging from 58° at Leith, Belmullet, and Valencia to 47° in the Shetlands. Night cold over England; sheltered thermometer at Cambridge, and grass temperature in London falling to 34°.

Wind moderate South-Westerly in the north of Scotland, North-Westerly on the eastern shores of the North Sea, and North-Easterly or Easterly at our southern and the French stations. Light Westerly breezes setting in later on many parts of our western coasts.

Sea moderate to smooth.

Barometer rising at all but our extreme northern stations. Large anticyclone now covering the whole of our Islands and the North Sea, with relatively low pressure in the south-west of France. Slight fall taking place generally later.



SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

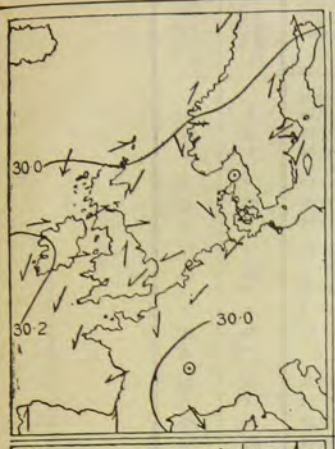
Weather

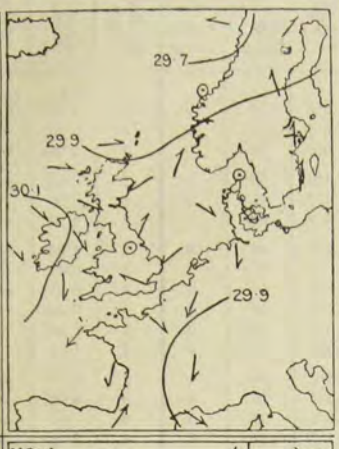
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, June 5.

Weather dull in France and also on our extreme northern coasts, with rain at Christiansund and Sumburgh Head, but generally fine elsewhere. Solar halos seen in the south of England later, and "mock sun" in London.

Temperature risen a little in the north, but fallen elsewhere; readings varying from 62° at Aberdeen to 48° at Sumburgh Head and Cambridge.

Wind light or moderate Westerly in the north of our Islands, and North-Easterly at our southern and the French stations, but variable over our more central districts.

Sea moderate off the north of Scotland, but slight or smooth elsewhere.

Barometer falling in most places. Anticyclone still lying over the greater part of our Islands and the North Sea, with relatively low pressures in the south-east of France. Fall continuing all day, and eastern portion of anticyclone breaking up.

Sunday, June 6.

Weather fine over Denmark, England, the south of Sweden, and the east of Ireland, but cloudy or overcast elsewhere, with rain in the west of Norway and some parts of France. Rain falling later at several of our more northern stations.

Temperature fallen a little in the north of our Islands, but risen elsewhere; readings ranging from 58° at York and Prawle Point to 46° in the Shetlands. Subsequently rising to 70° in London, 71° at Cambridge, and 72° at Loughborough.

Wind moderate Westerly or South-Westerly in Scandinavia and the north of our Islands, but North-Easterly or Northerly at our southern and the French stations. Subsequently backing to South-West in Ireland.

Sea moderate to smooth.

Barometer falling generally. Areas of high pressure lying over our western coasts and the southern shores of the Baltic, with a large depression over the northern parts of Scandinavia. Fall continuing all day and high pressure system over Baltic disappearing.

Monday, June 7.

Weather dull in France and the west of our Islands, with rain at Parsonstown, Liverpool, and Paris, but generally fine elsewhere. Improvement taking place at our western stations later, but rain continuing in Paris.

Temperature risen in most places; readings over our Islands ranging from 60° in London to 49° at Sumburgh Head and Stornoway. Subsequently rising to 71° in London and at Cambridge.

Wind Westerly or South-Westerly in Scandinavia, and North-Westerly on our northern coasts, but Northerly in the north of Ireland, and also at our southern and the French stations; light or moderate in force in most places.

Sea moderate at Sumburgh Head, but slight or smooth elsewhere.

Barometer falling generally. Area of relatively high pressure lying over the greater part of our Islands and the Bay of Biscay, with lowest readings in the north of Sweden. Rise taking place later at all but our western stations.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 89 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	54	38	51·0	41·9	46·1	− 3·1	29	0	5	0·34	−0·10	*	*
	Stornoway	59	36	54·4	42·6	48·1	− 2·1	43	0	3	0·25	−0·39	41	34
	Wick	63	36	57·3	42·7	49·5	− 0·6	53	0	1	0·06	−0·34	*	*
1. SCOTLAND, E.	Nairn	64	34	59·7	42·6	50·6	− 1·9	60	0	2	0·12	−0·29	*	*
	Aberdeen	67	35	59·0	43·4	50·7	− 0·8	61	0	2	0·36	−0·06	55	45
	Leith	69	34	60·6	43·1	51·2	− 2·0	64	0	2	0·63	+0·21	*	*
2. ENGLAND, N.E.	Alnwick Castle	64	36	56·4	43·6	49·6	− 2·5	53	0	1	1·32	+0·85	*	*
	Durham	73	36	59·4	42·1	50·2	− 3·4	57	0	3	0·69	+0·21	34	29
	Shields	65	37	57·1	43·4	49·8	− 2·5	55	0	1	0·85	+0·45	*	*
	Scarborough ℳ	61	40	55·8	44·5	49·8	− 3·4	55	0	1	0·38	−0·07	*	*
	York	68	38	61·4	43·3	51·7	− 3·2	68	0	1	0·26	−0·21	43	37
	Spurn Head	60	41	54·3	44·7	49·2	− 4·5	50	0	1	1·05	?	*	*
3. ENGLAND, E.	Hillington ℳ	69	33	63·9	40·6	51·9	− 2·2	75	4	1	0·26	−0·21	60	52
	Yarmouth	68	45	59·6	47·1	52·9	− 1·7	76	0	2	0·02	−0·43	*	*
	Geldeston	70	39	61·7	43·0	51·7	− 3·8	68	0	0	—	−0·40	68	60
	Cambridge	72	34	66·9	42·9	54·1	− 1·3	85	0	2	0·04	−0·46	62	54
	Rothamsted	75	36	64·5	43·9	53·5	− 2·9	81	0	2	0·56	+0·05	*	*
	Ingatestone	72	38	65·0	43·6	53·6	− 2·8	81	0	2	0·14	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	69	37	62·7	43·4	52·4	− 2·9	73	0	1	0·34	−0·19	36	31
	Loughborough	72	37	64·9	43·4	53·4	− 2·8	80	0	2	1·00	+0·49	*	*
	Leicester	70	38	64·3	44·1	53·5	− 1·9	81	0	2	0·95	+0·40	36	31
	Cheadle ℳ	65	40	59·2	42·9	50·5	− 3·9	60	0	1	0·69	+0·04	*	*
	Churchstoke ℳ	66	40	60·6	44·2	51·8	− 2·6	69	0	3	0·75	+0·27	26	23
	Hereford ℳ	72	44	66·4	47·7	56·4	+ 0·5	101	0	2	0·67	+0·18	*	*
	Cirencester	66	40	62·6	45·3	53·4	− 2·0	80	0	2	0·39	−0·14	46	40
	Oxford	68	40	63·4	46·1	54·2	− 1·7	85	0	2	0·95	+0·47	62	54
5. ENGLAND, S.	London†	74	42	67·1	48·9	57·4	+ 0·3	108	0	2	0·17	−0·28	59	52
	Strathfield Turgiss ℳ	73	38	67·4	44·3	55·1	+ 0·1	92	0	1	0·02	−0·40	*	*
	Dungeness	65	44	62·3	48·9	55·1	− 0·8	92	0	2	0·27	−0·13	*	*
	Hastings (St. Leonard's)	68	44	62·3	48·0	54·7	− 1·4	89	0	1	0·27	−0·13	64	57
	Southampton	73	44	67·3	48·6	57·3	+ 1·1	107	0	1	0·01	−0·55	57	50
	Hurst Castle	68	44	63·9	48·6	55·7	− 0·3	96	0	2	0·05	−0·48	*	*
	Stowell ℳ	68	42	63·7	47·6	55·1	+ 0·7	92	0	2	0·25	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	62	35	57·6	43·1	49·9	− 1·7	55	0	2	0·11	−0·95	*	*
	Glasgow	68	41	53·9	44·4	51·2	− 1·5	64	0	2	0·42	−0·18	37	31
	Ardrossan	59	40	56·4	44·3	49·9	− 3·2	55	0	2	0·12	−0·42	*	*
	Douglas (Isle of Man)	66	43	59·4	46·4	52·5	− 0·5	74	0	2	0·32	−0·16	43	37
7. ENGLAND, N.W.	Newton Reigny (Penrith)	68	34	59·3	41·6	49·8	− 2·8	56	1	1	0·71	+0·23	33	28
	Barrow-in-Furness	62	42	58·9	47·9	53·0	− 1·7	77	0	1	0·52	+0·03	*	*
	Stonyhurst	66	41	60·2	43·8	51·4	− 3·0	66	0	1	0·83	+0·11	45	39
	Blackpool ℳ	60	39	57·8	45·7	51·3	− 4·2	65	0	2	0·42	−0·07	42	36
	Manchester	67	43	60·5	44·6	52·0	− 3·4	70	0	1	0·95	+0·31	*	*
	Liverpool Obsy (Bidston)	62	45	58·9	47·6	52·9	− 2·4	76	0	3	0·38	−0·06	*	*
	Llandudno ℳ													
	Holyhead	64	47	59·1	48·4	53·4	− 2·1	80	0	4	0·64	+0·19	*	*
8. ENGLAND, S.W.	Llandovery	72	37	67·3	45·1	55·4	+ 0·4	94	0	2	0·75	+0·08	*	*
	Pembroke	62	50	58·6	50·6	54·3	− 0·7	86	0	3	0·57	+0·10	43	38
	Arlington (N. Devon)	65	43	62·6	46·6	54·0	− 1·1	84	0	3	0·39	−0·43	*	*
	Cullompton ℳ	71	44	66·2	47·0	55·9	0·0	97	0	3	0·26	−0·29	33	29
	Falmouth	63	50	60·1	50·3	54·9	− 0·7	90	0	1	0·17	−0·48	36	32
	Plymouth	70	49	63·5	50·7	56·7	+ 0·5	103	0	2	0·39	−0·09	30	27
	Prawle Point	66	45	59·6	48·7	53·8	− 0·8	83	0	3	0·42	?	*	*
9. IRELAND, N.	Malin Head	58	42	54·3	46·1	49·9	− 2·5	55	0	3	0·48	?	*	*
	Londonderry	70	36	62·1	45·0	53·0	− 0·5	77	0	2	0·69	+0·12	*	*
	Mullaghmore	63	41	58·3	47·4	52·5	− 2·5	74	0	3	0·28	−0·41	*	*
	Belmullet	63	45	58·7	48·9	53·5	+ 0·1	81	0	3	0·14	?	*	*
	Markree Castle	66	38	59·3	46·0	52·2	− 2·6	71	0	3	0·23	−0·36	10	9
	Brookeborough	67	36	60·3	45·7	52·5	− 2·4	74	0	3	1·05	?	*	*
	Armagh	65	38	60·7	45·8	52·7	− 1·8	75	0	2	0·30	−0·18	21	18
	Donaghadee	58	39	55·6	41·7	49·8	− 3·9	55	0	3	0·13	−0·35	*	*
	Edgeworthstown	67	41	58·4	46·1	51·8	− 1·6	69	0	3	0·74	+0·10	*	*
10. IRELAND, S.	Dublin	66	46	59·5	49·4	54·1	− 0·6	85	0	5	0·75	+0·30	15	13
	Parsonstown	64	45	60·3	48·0	53·7	− 1·3	82	0	4	0·23	−0·31	9	8
	Kilkenny	66	48	61·0	49·1	54·6	− 0·1	88	0	3	0·72	+0·22	*	*
	Waterford	69	47	61·9	48·8	54·9	− 1·2	90	0	4	0·33	−0·23	*	*
	Roche's Point	66	49	59·9	50·3	54·8	− 1·5	90	0	2	0·09	−0·65	*	*
	Valencia	64	50	61·0	51·3	55·8	+ 1·2	97	0	5	0·33	−0·42	20	18
	Killarney	63	45	60·7	49·1	54·5	− 0·1	88	0	5	0·51	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	50	58·4	51·0	54·4	− 1·2	87	0	2	0·07	−0·34	*	*
	Jersey (Noirmont)	68	47	61·6	50·6	55·7	− 0·9	96	0	1	0·18	−0·23	47	42

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 24.] *New Series.* WEEK ENDING MONDAY, 14TH JUNE, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 96.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	63	42	55·8	45·5	50·3	1 below.	58	0	375	− 95	669	+159
	1. SCOTLAND, EAST	70	43	60·2	46·9	53·1	1 below.	78	0	542	−123	734	+191
	2. ENGLAND, N.E.	71	43	61·4	47·4	53·9	1 below.	83	0	522	−171	697	+215
	3. ENGLAND, EAST	72	39	64·7	47·4	55·5	2 below.	95	0	734	−136	750	+243
	4. MIDLAND COUNTIES	71	40	64·2	48·5	55·8	1 below.	97	0	745	−156	721	+217
	5. ENGLAND, SOUTH	74	40	63·5	49·6	56·1	2 below.	99	0	820	−149	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	65	46	59·8	48·8	53·9	1 below.	83	0	521	−210	579	+181
	7. ENGLAND, N.W.*	70	41	61·6	50·0	55·3	1 below.	93	0	619 *	−151	612	+229
	8. ENGLAND, S.W.	70	42	61·3	48·9	54·7	2 below.	89	0	763	−194	490	+257
	9. IRELAND, NORTH	67	43	60·5	49·3	54·5	1 below.	88	0	635	−177	492	+142
	10. IRELAND, SOUTH	68	41	62·3	50·2	55·9	1 below.	97	0	773	−210	401	+162
	— CHANNEL ISLANDS	64	50	60·2	51·4	55·5	2 below.	95	0	878	−167	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 96.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			tOths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	2 more.	120	+16	15·4	+ 0·2	24	19	634	+ 5	31	+ 1
	1. SCOTLAND, EAST	5	9	4 more.	99	+15	12·4	+ 1·9	24	20	606	− 87	30	− 4
	2. ENGLAND, N.E.	3	2	3 less.	98	+15	12·4	+ 1·5	26	22	470	−151	23	− 7
	3. ENGLAND, EAST	5	4	1 less.	93	+ 8	10·0	− 0·4	40	34	641	−116	32	− 5
	4. MIDLAND COUNTIES	5	5	1 less.	96	+13	15·7	+ 3·8	32	28	528	−138	26	− 6
	5. ENGLAND, SOUTH	5	5	0 (average).	91	+11	12·7	+ 0·9	41	36	627	− 74	31	− 3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	6	10	3 more.	101	+ 8	19·6	+ 2·7	26	22	516	−141	25	− 7
	7. ENGLAND, N.W.*	5	7	2 less.	100	+25	18·1	+ 4·4	31	27	518 *	−147	25	− 7
	8. ENGLAND, S.W.	6	6	1 less.	102	+11	18·1	− 0·2	43	38	620	−149	30	− 7
	9. IRELAND, NORTH	6	13	7 more.	103	+ 1	17·6	+ 2·8	24	21	477	−182	23	− 9
	10. IRELAND, SOUTH	5	6	0 (average).	103	+ 5	19·4	+ 1·6	29	25	556	−178	27	− 8
	— CHANNEL ISLANDS	4	4	1 less.	116	+18	14·9	+ 0·9	36	32	740	−167	36	− 8

General Remarks.

Weather has been in a dull and unsettled condition generally, with frequent falls of rain. Thunder and lightning were experienced in many parts of England on the 9th, and again in some localities towards the end of the period.

Temperature has been below the mean over the whole Kingdom, the deficit being 1° or 2°. The highest of the maxima, which were recorded on the 11th in most parts of Great Britain and on irregular dates in Ireland, varied between 63° and 70° in Scotland, 67° and 68° in Ireland, and 70° and 74° in England. During the greater part of the week the daily maxima were much lower than these readings. The lowest of the minima, which were registered on various dates in different districts, ranged from 39° in "England, E." to 46° in "Scotland, W." and to 50° in the "Channel Islands".

Rainfall has been more than the mean in "Ireland, N." and over Scotland, but rather less or about equal to it elsewhere.

Bright sunshine shows a slight increase over Ireland and in "England, S.W." on the low percentages recorded there last week, but in all other parts of the Kingdom a decided decrease is shown. The percentages of the possible duration ranged from 19 in "Scotland, N." to 36 in "England, S." and 38 in "England, S.W."

Depressions observed.—At the commencement of the period a shallow depression lay over the north of France and the winds over the greater part of our Islands were light from North-East or East. On the 9th, however, this disappeared and during the remainder of the week small, shallow disturbances passed over our Islands in a north-easterly direction, while some larger ones skirted our western and northern coasts. Light winds, generally between South and West, were consequently most prevalent over the United Kingdom, but at the end of the period they increased considerably in force in the west and north, and in some localities blew a slight gale.

* These figures have been altered somewhat owing to the receipt of some arrears of observations from Llandudno.

E 22566. 350.—6/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

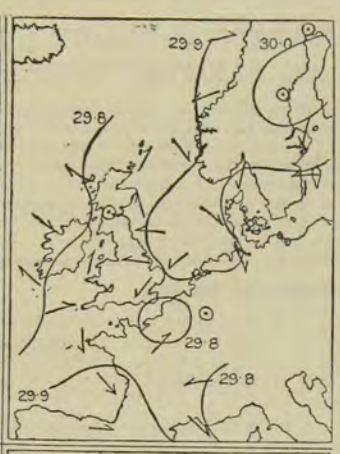
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Tuesday, June 8.

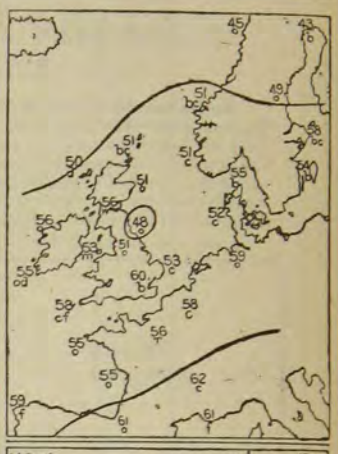
Weather dull and rainy at several of our western and northern stations, but fair or fine elsewhere. Solar halo seen at Oxford.

Temperature fallen a few degrees in the east, but risen in most other localities; readings ranging from 65° at Prawle Point and 60° in London to 48° at Shields. Highest maxima 72° at Cambridge, 71° at Loughborough, and 70° in London.

Wind light or moderate from South or South-West on our western and northern coasts, but North-Easterly at our south-eastern and most of the Continental stations. Moderate North-Westerly breezes subsequently setting in over Bay of Biscay.

Sea slight or smooth generally.

Barometer rising at all but our western and northern stations. Pressure highest over Gulf of Bothnia, but long band of relatively high readings extending across the North Sea and the British Islands to the Bay of Biscay. Shallow depressions subsequently appearing over Ireland and the north-east of France.



Wednesday, June 9.

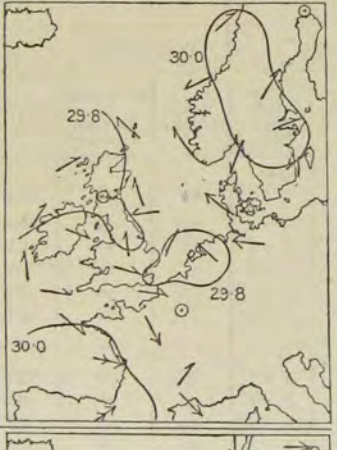
Weather fine in Scandinavia, Denmark, and the south-west of England, but cloudy elsewhere, with mist in many parts of the United Kingdom, and rain at Aberdeen, Malin Head, and Paris. Heavy rain falling in Ireland later.

Temperature fallen a little in the south and south-east, but risen elsewhere; readings ranging from 61° at Scilly to 48° in the Shetlands. Highest maxima 71° in London and 70° at Loughborough, Liverpool, and Cambridge.

Wind moderate from South or South-East on our western and northern coasts, but Easterly or North-Easterly over the Netherlands and south-east of England, and fresh from West or North-West in the west and south of France.

Sea slight generally.

Barometer falling at nearly all stations. Pressure highest in Sweden, but relatively high over the Bay of Biscay, with a large depression to the westward of our Islands, and a smaller system over the north-east of France. Fall continuing all day.



Thursday, June 10.

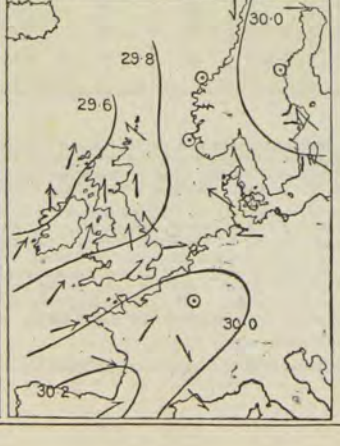
Weather fine in Scandinavia, Denmark, and some parts of Ireland, but cloudy or overcast elsewhere, with mist in Scotland and rain in many parts of England and France. Weather improving later.

Temperature charged irregularly; readings ranging from 60° at Holyhead to 47° at Aberdeen and Shields.

Wind Westerly or North-Westerly over the western parts of our Islands and France, but South-Easterly in the north and east, and variable at the more central stations; light or moderate in force generally. Westerly breezes subsequently extending to our southern coasts.

Sea moderate to smooth.

Barometer falling in England, the Netherlands, and the north of France, but rising elsewhere. Pressure highest in Spain, but relatively high over the Baltic, with a depression over our north-west coasts, and several shallow disturbances over England. Low pressure systems filling up later, and barometer rising generally.



Friday, June 11.

Weather dull at most of our western and northern stations, but fine elsewhere. Solar halo reported at Jersey. Rain falling later over the greater part of the United Kingdom and France; thunder occurring at Spurn Head, and lightning at Ardrossan.

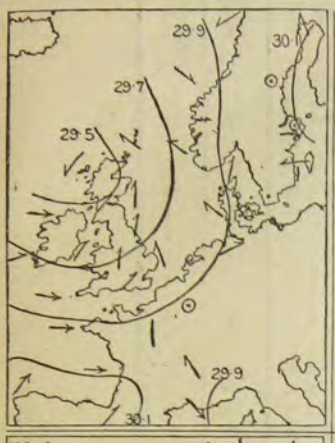
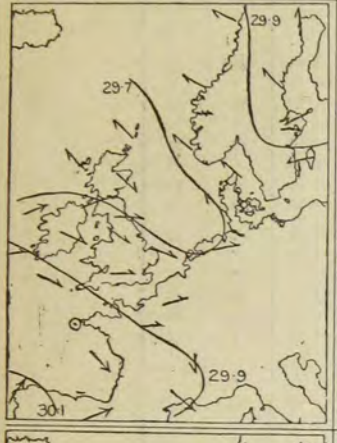
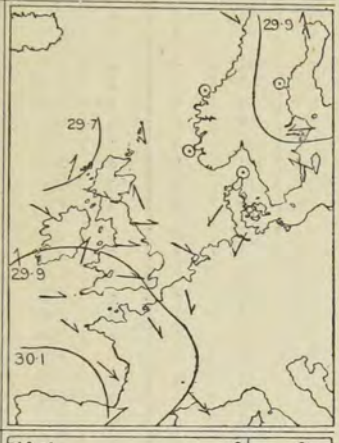
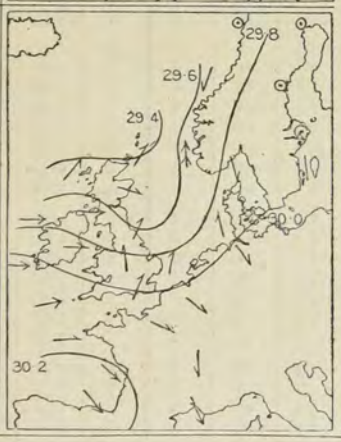
Temperature risen slightly; readings ranging from 61° at Cambridge to 48° in the Shetlands. Subsequently rising to 70° at York and Yarmouth and 71° at Cambridge.

Wind South-Easterly over the north of Scotland and the eastern shores of the North Sea, but Southerly or South-Westerly on our western coasts and Westerly at our south-eastern and the French stations; light to fresh in force generally.

Sea rather rough on our extreme south-west coasts.

Barometer rising at all but the Irish and Scotch stations. Pressure highest in Spain but relatively high over the Gulf of Bothnia, with a large depression to the westward of our Islands. Slight fall taking place generally later.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, June 12.** *Weather* rainy in the north of Sotland and south-west of France and showery at several of our western stations, but fine in the east. Showers falling generally later, and thunderstorms occurring at Nairn and Spurn Head. *Temperature* risen slightly in the east; readings ranging from 60° at Cambridge to 49° at Sumburgh Head and Wick. *Wind* Westerly in Ireland and the west of France, South-Westerly in England and South-Easterly on the eastern shores of the North Sea as well as in the Shetlands; moderate or fresh in force in most places. *Sea* rather rough at Valencia, moderate to smooth elsewhere. *Barometer* falling generally. Pressure high both in Sweden and Spain, with a large but shallow depression over Scotland. Depression subsequently moving northwards, and barometer rising at our western stations.	
		**Sunday, June 13.** *Weather* rainy at Aberdeen, Biarritz, and Corunna, and dull in France, but generally fine elsewhere. Showers falling later in most parts of the United Kingdom, and a thunderstorm occurring at Yarmouth. *Temperature* risen in Scandinavia and Denmark, but fallen slightly elsewhere; readings ranging from 57° at Cambridge to 50° in the Shetlands. *Wind* South-Easterly in Scandinavia as well as in the Shetlands and Hebrides, but Westerly or North-Westerly elsewhere; light or moderate in force generally. Subsequently backing to South on our extreme western coasts. *Sea* moderate to smooth generally. *Barometer* falling in Scandinavia, Denmark, and the south of France, but rising elsewhere. Pressure still high in Sweden and Spain, with a depression off the north-west of Scotland and a subsidiary hollow over North Sea. No important change later.	
		**Monday, June 14.** *Weather* rainy at our western stations and foggy in the south-west, but fair or fine elsewhere. Rain extending later to most parts of the Kingdom, and lightning occurring at Stornoway. *Temperature* fallen a little in the north, but changed irregularly elsewhere; readings ranging from 60° in London to 47° in the Shetlands. *Wind* light or moderate from North-West in the east and south of France, but South-Westerly or Southerly elsewhere. Strong in force on the west coasts of Ireland and Scotland. Subsequently veering to West on our western and northern coasts. *Sea* rough at Stornoway and Valencia, but moderate to smooth elsewhere. *Barometer* falling in Sweden, and also on our extreme north-west coasts, but rising elsewhere. Pressure highest in Spain, but relatively high over Scandinavia, with a large depression to the north-westward of our Islands. Depression subsequently moving eastwards, and barometer falling generally.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 93 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	58	42	51·6	44·9	48·0	− 2·7	42	0	4	0·71	+0·23	*	*
	Stornoway	62	42	57·7	45·0	50·9	− 0·8	62	0	5	0·66	−0·03	24	19
	Wick	63	45	58·1	46·7	52·0	+ 0·3	70	0	5	0·75	+0·35	*	*
1. SCOTLAND, E.	Nairn	70	43	63·4	48·0	55·2	+ 1·3	92	0	5	0·70	+0·26	*	*
	Aberdeen	62	44	56·1	45·7	50·5	− 3·2	60	0	6	0·49	+0·06	24	20
	Leith	67	46	61·0	46·9	53·5	− 1·2	81	0	5	1·38	+0·95	*	*
2. ENGLAND, N.E.	Alnwick Castle	64	46	59·4	47·9	53·3	− 0·6	79	0	2	0·04	−0·42	*	*
	Durham	71	43	65·9	47·2	55·9	+ 0·9	97	0	5	0·16	−0·32	29	24
	Shields	66	45	58·7	46·1	52·0	− 2·2	70	0	3	0·10	−0·50	*	*
	Scarborough ℔	—	—	—	—	—	—	—	—	4	0·24	−0·23	*	*
	York	70	45	63·6	48·4	55·5	− 1·0	95	0	4	0·42	−0·13	23	20
	Spurn Head	67	45	59·6	48·3	53·6	− 1·8	81	0	2	0·34	?	*	*
3. ENGLAND, E.	Hillington ℔	69	39	66·4	45·5	55·2	− 0·9	92	0	5	0·24	−0·28	43	37
	Yarmouth	70	43	61·6	48·4	54·5	− 2·1	88	0	5	0·28	−0·18	*	*
	Geldeston	70	39	62·8	47·3	54·5	− 2·6	88	0	4	0·45	+0·04	32	28
	Cambridge	72	41	68·4	48·0	57·5	0·0	109	0	5	0·52	−0·03	44	38
	Rothamsted	67	44	64·3	48·0	55·6	− 2·8	95	0	5	0·51	−0·01	*	*
	Ingatestone	67	42	64·9	47·3	55·5	− 2·9	95	0	3	0·08	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	71	42	65·1	48·9	56·4	− 0·5	101	0	3	0·48	−0·11	28	24
	Loughborough	71	44	66·0	48·9	56·9	− 1·3	104	0	5	0·48	−0·09	*	*
	Leicester	69	43	64·3	47·9	55·5	− 2·4	95	0	5	0·44	−0·16	27	23
	Cheadle ℔	65	45	61·2	47·6	53·9	− 2·2	83	0	5	0·50	−0·22	*	*
	Churchstoke ℔	67	43	62·9	47·9	54·9	− 1·4	90	0	7	0·57	+0·06	26	22
	Hereford ℔	71	46	?67·9	?49·3	?58·0	+?0·4	112	0	6	0·54	−0·03	*	*
	Cirencester	67	40	62·4	47·0	54·2	− 2·7	85	0	6	0·45	−0·13	37	32
	Oxford	67	46	63·4	50·6	56·6	− 1·3	102	0	4	0·35	−0·17	39	34
5. ENGLAND, S.	London†	71	45	67·0	50·4	58·1	− 1·2	113	0	5	0·51	+0·03	42	37
	Strathfield Turgiss ℔	72	40	66·9	46·6	56·0	− 0·9	98	0	6	0·45	−0·02	*	*
	Dungeness	62	44	59·7	50·6	54·8	− 2·9	90	0	5	0·75	+0·35	*	*
	Hastings (St. Leonard's)	66	48	61·3	50·2	55·5	− 2·0	95	0	6	0·52	+0·12	39	35
	Southampton	74	47	66·3	50·6	57·9	0·0	111	0	4	0·41	−0·05	41	36
	Hurst Castle	66	48	62·0	51·9	56·6	− 1·1	102	0	5	0·25	−0·22	*	*
	Stowell ℔	68	44	61·6	47·1	53·9	− 2·5	83	0	2	0·32	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	65	47	59·8	49·3	54·2	+ 0·7	85	0	6	1·58	+0·40	*	*
	Glasgow	65	46	60·3	48·6	54·0	− 0·3	84	0	6	0·91	+0·27	14	12
	Ardrossan	63	49	59·3	50·1	54·4	− 0·3	87	0	6	0·80	+0·22	*	*
	Douglas (Isle of Man)	63	46	59·7	47·0	52·9	− 1·7	76	0	4	0·81	+0·31	37	32
7. ENGLAND, N.W.	Newton Reigny (Penrith)	68	41	63·2	47·9	55·0	+ 0·3	91	0	6	0·67	+0·16	35	29
	Barrow-in-Furness	64	50	59·4	51·9	55·4	− 0·8	94	0	3	0·69	+0·14	*	*
	Stonyhurst	65	45	61·1	48·6	54·4	− 1·3	87	0	3	1·50	+0·73	24	21
	Blackpool ℔	67	45	61·0	49·7	54·0	− 2·7	84	0	7	1·02	+0·51	27	23
	Manchester	68	44	63·0	49·2	55·6	− 1·3	95	0	3	0·71	+0·01	*	*
	Liverpool Obsy (Bidston)	70	49	63·6	51·7	57·2	+ 0·5	106	0	5	0·50	+0·05	*	*
	Llandudno ℔	66	49	62·2	50·6	56·0	− 1·1	98	0	5	0·39	−0·04	38	33
	Holyhead	63	48	59·6	50·3	54·6	− 1·1	88	0	4	0·33	−0·14	*	*
8. ENGLAND, S.W.	Llandovery	70	44	64·4	47·0	55·1	− 2·1	92	0	5	1·02	+0·32	*	*
	Pembroke	58	47	56·6	50·6	53·4	− 2·8	80	0	5	0·72	+0·24	48	42
	Arlington (N. Devon)	66	46	60·4	47·7	53·6	− 3·2	81	0	6	0·59	−0·31	*	*
	Cullompton ℔	69	42	64·6	47·8	55·6	− 1·9	95	0	5	0·38	−0·21	34	30
	Falmouth	64	48	61·2	49·4	54·9	− 2·3	90	0	6	0·65	−0·02	54	48
	Plymouth	67	46	63·2	50·6	56·5	− 1·2	102	0	6	0·33	−0·15	37	33
	Prawle Point	65	47	59·0	49·0	53·7	− 2·2	82	0	6	0·37	?	*	*
9. IRELAND, N.	Malin Head	62	46	57·7	49·0	53·1	− 1·1	78	0	6	1·07	?	*	*
	Londonderry	67	45	62·7	48·1	54·9	− 0·3	90	0	7	2·50	+1·92	*	*
	Mullaghmore	61	49	59·6	52·0	55·5	− 0·9	95	0	6	1·24	+0·52	*	*
	Belmullet	59	49	57·1	51·1	53·9	− 0·8	83	0	7	0·87	?	*	*
	Markree Castle	65	45	61·3	48·8	54·6	− 1·4	88	0	7	1·71	+1·03	23	20
	Brookeborough	65	45	62·0	49·2	55·2	− 1·2	92	0	6	1·52	?	*	*
	Armagh	65	45	62·5	49·6	55·6	− 0·6	95	0	6	1·13	+0·65	24	21
	Donaghadee	64	45	59·3	47·3	52·9	− 2·5	76	0	6	0·40	−0·08	*	*
	Edgeworthstown	65	43	62·7	48·7	55·2	− 0·3	92	0	6	1·34	+0·60	*	*
10. IRELAND, S.	Dublin	68	48	64·6	51·6	57·7	+ 1·5	110	0	6	0·89	−0·06	31	27
	Parsonstown	65	45	62·7	49·7	55·8	− 0·4	97	0	6	1·49	+0·93	32	28
	Kilkenny	66	44	63·0	49·6	55·8	− 0·4	97	0	6	0·66	+0·14	*	*
	Waterford	66	46	63·2	49·6	55·9	− 1·6	97	0	3	0·17	−0·41	*	*
	Roche's Point	63	48	60·9	50·9	55·6	− 2·2	95	0	4	0·73	−0·02	*	*
	Valencia	61	48	59·9	51·0	55·1	− 0·6	92	0	6	0·80	+0·01	23	20
	Killarney	64	41	61·9	49·3	55·2	− 1·1	92	0	5	0·27	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	50	60·7	51·7	55·9	− 0·8	97	0	3	0·36	−0·08	*	*
	Jersey (Noirmont)	64	50	59·3	51·0	55·0	− 2·5	91	0	4	0·35	−0·07	36	32

Stations marked ℔ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

NOTE.—The Temperature observations at Scarborough for this week appear incorrect, and have consequently been omitted.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 25.] *New Series.* WEEK ENDING MONDAY, 21ST JUNE, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1865-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 100.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
				Averages of				For the Week.		Since December 29, 1885.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	65	43	55·7	45·0	50·0	2 below.	56	0	431	−108	669	+159
	1. SCOTLAND, EAST	71	38	62·2	45·8	53·4	2 below.	80	0	622	−135	734	+191
	2. ENGLAND, N.E.	64	43	56·4	46·5	51·1	5 below.	64	0	586	−205	697	+215
	3. ENGLAND, EAST	68	43	58·8	47·2	52·6	6 below.	74	0	808	−170	750	+243
	4. MIDLAND COUNTIES	75	42	60·2	46·9	53·1	6 below.	78	0	823	−185	721	+217
	5. ENGLAND, SOUTH	76	43	63·9	48·2	55·5	4 below.	95	0	915	−167	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	77	41	61·0	47·7	53·9	2 below.	83	0	604	−221	579	+181
	7. ENGLAND, N.W.	73	41	59·4	48·5	53·6	4 below.	81	0	700	−171	612	+229
	8. ENGLAND, S.W.	77	42	63·3	48·7	55·5	3 below.	95	0	858	−204	490	+257
	9. IRELAND, NORTH	69	43	59·6	48·2	53·5	3 below.	81	0	716	−191	492	+142
	10. IRELAND, SOUTH	72	45	64·9	50·1	57·0	1 below.	105	0	878	−203	491	+162
	— CHANNEL ISLANDS	63	48	59·6	51·8	55·4	3 below.	94	0	972	−181	202	+109

Rainfall. **Bright Sunshine.**

	DISTRICTS. (See p. 100.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	2	3 less.	123	+15	15·6	− 0·1	44	35	678	+ 20	31	+ 1
	1. SCOTLAND, EAST	0	−	4 less.	99	+11	12·4	+ 1·5	50	41	656	− 71	30	− 3
	2. ENGLAND, N.E.	3	1	4 less.	101	+14	12·5	+ 1·1	33	28	503	−147	23	− 7
	3. ENGLAND, EAST	3	2	3 less.	96	+ 7	10·2	− 0·6	16	14	657	−138	31	− 6
	4. MIDLAND COUNTIES	2	1	5 less.	98	+11	15·8	+ 3·3	24	21	552	−148	26	− 6
	5. ENGLAND, SOUTH	1	1	4 less.	92	+ 8	12·8	+ 0·6	39	34	666	− 72	31	− 3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	1	2	6 less.	102	+ 5	19·8	+ 2·4	49	41	565	−127	26	− 6
	7. ENGLAND, N.W.	1	less than ½	6 less.	101	+12	18·1	+ 3·8	38	33	556	−139	26	− 6
	8. ENGLAND, S.W.	1	less than ½	6 less.	103	+ 8	18·1	− 0·9	57	50	677	−136	32	− 6
	9. IRELAND, NORTH	2	1	6 less.	105	− 2	17·7	+ 2·2	53	45	530	−159	25	− 7
	10. IRELAND, SOUTH	1	less than ½	6 less.	104	+ 2	19·4	+ 1·0	54	46	610	−160	28	− 8
	— CHANNEL ISLANDS	2	2	2 less.	118	+15	15·1	+ 0·6	72	64	812	−150	33	− 6

General Remarks.

Weather has been cold and unseasonable in nearly all parts of the Kingdom. In most of the English districts a good deal of cloud prevailed, but in Ireland and Scotland the sky was clearer. Thunder and lightning occurred in a few places, and at some stations a little rain fell, but, as a rule, the weather was dry.

Temperature has been below the mean, the deficit ranging from between 1° and 3° in Ireland and Scotland, to 4° in "England, N.W." and "England, S.", 5° in "England, N.E." and 6° in "England, E." and the "Midland Counties". The highest of the maxima, which were generally recorded on the 19th, varied from 63° in the "Channel Islands" and 64° in "England, N.E.", to 77° in "England, S.W." and "Scotland, W." During the greater part of the week, the daily maxima were very low for the time of year; thus, on the 18th the thermometer at Scarborough did not exceed 48°, and at Shields and Spurn Head 50°, while even in London it only rose to 52°. The lowest of the minima, which were registered on different days in the various districts, ranged from 38° in "Scotland, E." to 45° in "Ireland, S." and 48° in the "Channel Islands".

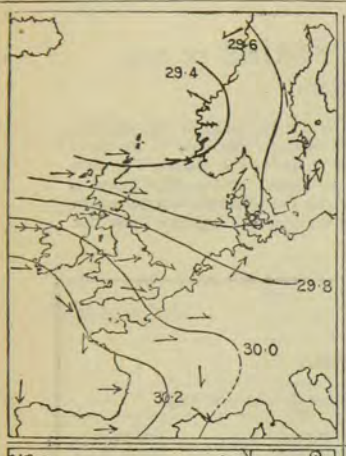
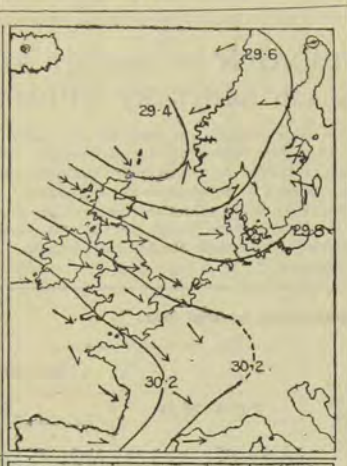
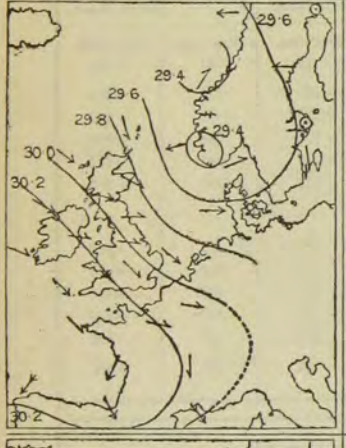
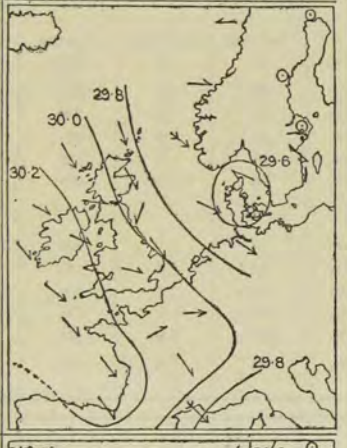
Rainfall has been considerably less than the mean in all districts; in many localities rain was altogether absent.

Bright sunshine shows a decrease over eastern, central, and southern England, but an increase elsewhere. The percentages of the possible duration varied between 14 in "England, E." and 21 in the "Midland Counties", to 41 in the east and west of Scotland, between 45 and 50 in Ireland and the south-west of England, and to 64 in the "Channel Islands".

Depressions observed.—During the first few days of this period a depression, which had advanced to the north of Scotland from the south-westward, moved in a South-Easterly direction, and disappeared over Germany on the 18th. In the rear of this disturbance (*i.e.*, over our Islands and the North Sea) the wind veered to the North-Westward or Northward and blew freshly or strongly; in the north of Scotland a North-Westerly gale was experienced. During the 19th and 20th the winds and weather over the United Kingdom were affected by a depression which had been formed over the Netherlands, while at the end of the period they were influenced by a rather shallow disturbance over the south of Scandinavia. On the 19th, the Northerly wind increased considerably along our east and south-east coasts, and at Spurn Head attained the force of a gale.

E 22643. 350.—6/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, June 15.** *Weather* fair over the greater part of Western Europe, but rain falling at Biarritz and passing showers at Nairn and Malin Head. Showers falling later in many places. *Temperature* fallen a little generally; readings ranging from 58° at Dungeness to 48° in the Shetlands. Highest maxima 68° at Hurst Castle and 66° at Dungeness; thermometer over central England not exceeding 64° all day. *Wind* strong Westerly on all our more northern coasts, but moderate North-Westerly at our southern and the French stations, and Southerly or South-Easterly in Scandinavia. Subsequently increasing to gale from West in the west and north of Scotland. *Sea* rough on our western and extreme northern coasts. *Barometer* falling in Scandinavia and Denmark, but rising elsewhere. Anticyclone with readings above 30·3 ins. lying over the southern part of the Bay of Biscay, with large depression to the northward of Scotland. Depression subsequently moving eastwards.	
		**Wednesday, June 16.** *Weather* rainy in the south of Norway and also in the Hebrides, but fair or fine elsewhere. Showers falling later in many parts of the United Kingdom. *Temperature* fallen a little at all but our south-western stations; readings over our Islands ranging from 58° at Roche's Point to 49° at Stornoway and Malin Head, but thermometer at Bodö and Haparanda as high as 65°. *Wind* variable in Norway and Sweden, but Westerly or North-Westerly elsewhere; strong in force on all the more exposed parts of our north and east coasts, with a gale at Wick. *Sea* rough on our north-west coasts and also off the north-east of Scotland, but moderate to smooth elsewhere. *Barometer* rising at all but the Danish and southern Scandinavian stations. Depression of previous day lying over Norway in morning, but subsequently moving south-eastwards. Slight fall taking place later over France and the south of England.	
		Thursday, June 17. *Weather* fine in the north of Scandinavia and also in Spain and the south of France, but cloudy elsewhere, with showers locally. Thunderstorm occurring at Shields in afternoon. *Temperature* fallen at all but the Scandinavian stations; readings over our Islands ranging from 60° at Prawle Point to 47° at Wick, but thermometer as high as 71° at Haparanda and 66° at Bodö. *Wind* fresh North-Westerly or Westerly in most places, but strong to a gale from North-North-East at Corunna and Lisbon. *Sea* rather rough at Wick, moderate to smooth elsewhere. *Barometer* rising at all our more northern stations, but falling in the south. Pressure now highest off our south-west coasts, with depression of previous two days lying over the Baltic and North Germany. No important change later.	
		Friday, June 18. *Weather* fair over the greater part of western Europe, but dull locally. Slight drizzling rain falling later over our eastern and midland counties. *Temperature* risen in Scandinavia and Denmark, but fallen a little in France and the south of England; readings over our Islands ranging from 58° at Roche's Point to 48° at several of our northern and eastern stations, but thermometer as high as 72° at Haparanda and 71° at Hernosand. Maximum at Hernosand 34° higher than that in London. *Wind* generally Northerly; moderate in force in the west, but fresh or strong at some of the eastern stations. *Sea* rather rough on the more exposed parts of our north and east coasts. *Barometer* falling over the greater part of England, Ireland, and France, but rising elsewhere. Pressure high to the westward of our Islands and relatively low over the Baltic. Slight fall taking place generally later.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

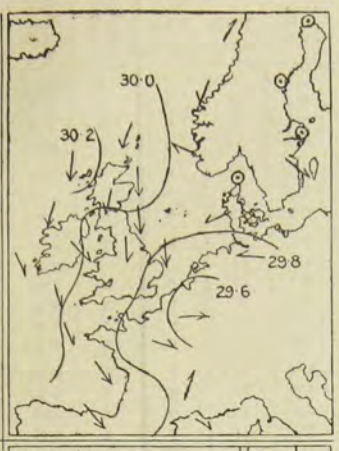
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Saturday, June 19.

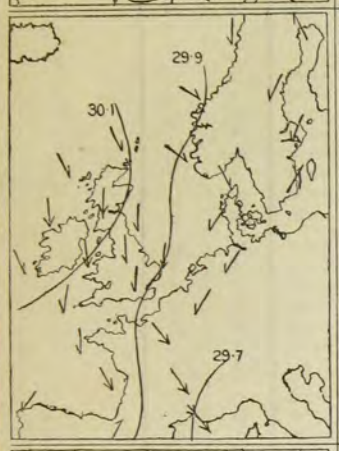
Weather dull and showery over the Netherlands, the east of England, and the north-east of France, but generally fine elsewhere. Severe thunderstorms occurring at some of the southern stations in evening.

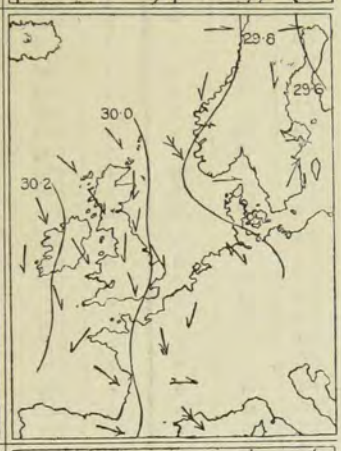
Temperature fallen a little in Scandinavia, Denmark, and the west of France, but risen elsewhere; readings ranging from 61° at Valencia to 48° at Spurn Head. Subsequently rising to 75° at Hurst Castle and to 77° at Ardrossan and Prawle Point.

Wind South-Easterly in Denmark and North-Easterly in Norway, but Northerly or North-Westerly elsewhere; moderate in force generally, but strong at some of our eastern stations.

Sea rather rough at Wick, Spurn Head, and Yarmouth, but moderate to smooth elsewhere.

Barometer fallen generally. Pressure highest to the westward of our Islands, with a well-marked depression over the Netherlands. Depression subsequently moving southwards, and barometer rising at all but the French stations.





Sunday, June 20.

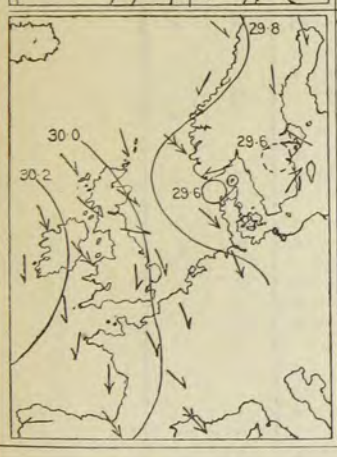
Weather fair generally, but with slight showers locally.

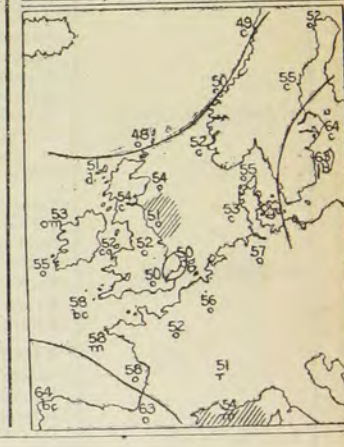
Temperature fallen in Norway and the north and east of Great Britain, but risen elsewhere; readings ranging from 65° at Valencia to 48° at Shields. Highest maxima 72° at Parsonstown and 71° at Valencia.

Wind North-Westerly in France and the north of Scotland, but Northerly or North-Easterly elsewhere; strong at some of our eastern and southern stations.

Sea rough off the east of England, but moderate or smooth elsewhere.

Barometer rising at all but the Swedish stations. Pressure highest to the westward of our Islands, with relatively low readings over the Gulf of Bothnia and the south-east of France. Slight fall taking place later at all our more northern stations.





Monday, June 21.

Weather fine in the south of England, but cloudy elsewhere, with rain on our extreme north-west coasts, and fog or mist in the north-west of France.

Temperature fallen several degrees in the north of Sweden, and less decidedly in all other parts of western Europe; readings over our Islands ranging from 65° at Prawle Point, to 48° at Sumburgh Head.

Wind moderate from between South-East and South-West in the south of Sweden, but Northerly or North-Westerly elsewhere.

Sea rough at Spurn Head, moderate to smooth elsewhere.

Barometer rising at our southern and the French stations, but falling in the north. Pressure highest off the west of Ireland, and lowest over the south of Scandinavia. Fall becoming general later.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟩⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 97 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	65	44	54·7	44·4	49·2	− 2·5	50	0	3	0·21	−0·27	*	*
	Stornoway	60	43	56·0	45·4	50·9	− 0·9	62	0	3	0·13	−0·57	44	35
	Wick	60	44	55·6	45·1	50·0	− 2·7	56	0	2	0·27	−0·14	*	*
1. SCOTLAND, E.	Nairn	67	38	60·9	43·9	51·8	− 3·2	69	0	0	—	−0·45	*	*
	Aberdeen	63	45	60·3	46·9	53·1	− 2·3	78	0	0	—	−0·45	50	41
	Leith	71	45	65·4	46·7	55·4	− 0·6	94	0	0	—	−0·43	*	*
2. ENGLAND, N.E.	Alnwick Castle	60	45	56·1	47·3	51·4	− 3·8	66	0	3	0·07	−0·40	*	*
	Durham	64	44	59·0	46·0	52·1	− 4·2	71	0	2	0·06	−0·43	34	29
	Shields	61	43	56·4	44·6	50·1	− 5·8	57	0	2	0·06	−0·57	*	*
	Scarborough ℜ	62	45	54·8	46·8	50·5	− 5·7	60	0	3	0·15	−0·35	*	*
	York	64	44	59·1	46·7	52·5	− 5·5	74	0	3	0·07	−0·50	32	27
	Spurn Head	58	46	53·1	47·7	50·2	− 6·5	57	0	5	0·23	?	*	*
3. ENGLAND, E.	Hillington ℜ	63	46	56·6	47·6	51·8	− 5·9	69	0	4	0·39	−0·17	9	8
	Yarmouth	62	46	56·7	48·4	52·3	− 5·7	72	0	5	0·36	−0·12	*	*
	Geldeston	63	46	58·0	48·1	52·7	− 5·4	75	0	3	0·31	−0·11	20	17
	Cambridge	66	43	60·9	46·1	53·0	− 6·7	77	0	2	0·08	−0·47	18	16
	Rothamsted	68	44	59·7	46·4	52·6	− 7·1	74	0	2	0·03	−0·49	*	*
	Ingatestone	68	44	60·7	46·3	53·0	− 7·3	77	0	1	0·15	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	66	44	59·4	46·9	52·7	− 5·7	75	0	2	0·03	−0·53	19	16
	Loughborough	67	42	59·0	47·3	52·7	− 6·8	75	0	3	0·04	−0·52	*	*
	Leicester	68	44	59·2	46·6	52·5	− 7·1	74	0	2	0·08	−0·52	16	14
	Cheadle ℜ	70	44	57·2	46·4	51·4	− 6·3	66	0	4	0·15	−0·56	*	*
	Churchstoke ℜ	72	44	60·6	46·0	52·8	− 4·6	76	0	1	0·01	−0·52	30	26
	Hereford ℜ	75	44	63·9	48·2	55·5	− 3·4	95	0	1	0·01	−0·51	*	*
	Cirencester	72	42	61·7	45·9	53·3	− 4·8	79	0	2	0·02	−0·58	28	24
	Oxford	72	44	60·9	47·6	53·8	− 5·4	83	0	2	0·14	−0·39	26	23
5. ENGLAND, S.	London†	71	45	62·1	48·1	54·6	− 6·0	88	0	1	0·09	−0·39	30	26
	Strathfield Turgiss ℜ	75	43	65·4	47·5	55·8	− 2·3	97	0	3	0·06	−0·42	*	*
	Dungeness	68	45	62·7	48·1	54·9	− 4·2	90	0	1	0·02	−0·38	*	*
	Hastings (St. Leonard's)	69	46	61·5	49·1	54·9	− 3·8	90	0	0	—	−0·40	42	37
	Southampton	76	46	65·6	48·1	56·2	− 3·0	99	0	2	0·22	−0·25	45	39
	Hurst Castle	75	45	67·6	49·3	57·8	− 0·9	112	0	2	0·18	−0·30	*	*
	Stowell ℜ	71	43	62·2	46·9	54·0	− 4·0	84	0	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	68	41	58·4	46·4	52·0	− 2·8	70	0	2	0·49	−0·73	*	*
	Glasgow	75	47	64·5	47·9	55·6	0·0	95	0	0	—	−0·70	50	41
	Ardrossan	77	47	61·6	48·4	54·5	− 1·3	88	0	1	0·02	−0·59	*	*
	Douglas (Isle of Man)	67	45	59·4	48·0	53·3	− 2·4	79	0	2	0·08	−0·44	48	41
7. ENGLAND, N.W.	Newton Reigny (Penrith)	72	41	61·0	44·6	52·2	− 3·5	71	0	1	0·05	−0·47	51	43
	Barrow-in-Furness	70	47	59·6	49·7	54·3	− 3·1	86	0	2	0·09	−0·49	*	*
	Stonyhurst	73	46	59·7	47·6	53·2	− 3·5	78	0	0	—	−0·82	34	29
	Blackpool ℜ	68	45	59·4	48·9	53·8	− 3·9	83	0	1	0·02	−0·50	35	30
	Manchester	73	45	61·0	47·4	53·7	− 4·6	82	0	2	0·04	−0·73	*	*
	Liverpool Obsy (Bidston)	62	49	58·4	50·3	54·1	− 4·1	85	0	1	0·01	−0·46	*	*
	Llandudno ℜ	65	48	59·6	49·7	54·3	− 3·6	86	0	0	—	−0·46	33	28
	Holyhead	60	49	56·7	50·0	53·1	− 3·6	78	0	0	—	−0·49	*	*
8. ENGLAND, S.W.	Llandovery	75	43	65·7	46·7	55·5	− 3·0	95	0	1	0·03	−0·71	*	*
	Pembroke	62	47	58·7	50·1	54·1	− 3·3	85	0	0	—	−0·49	55	48
	Arlington (N. Devon)	66	45	59·7	46·6	52·7	− 5·3	75	0	1	0·05	−0·90	*	*
	Cullompton ℜ	76	42	66·3	47·1	56·0	− 2·8	98	0	0	—	−0·60	50	44
	Falmouth	66	49	60·7	51·2	55·6	− 2·8	95	0	2	0·10	−0·58	60	53
	Plymouth	74	49	65·8	50·7	57·7	− 1·5	110	0	1	0·01	−0·47	61	54
	Prawle Point	77	47	65·9	48·6	56·7	− 0·2	103	0	0	—	?	*	*
9. IRELAND, N.	Malin Head	58	44	55·3	48·0	51·4	− 3·8	66	0	3	0·21	?	*	*
	Londonderry	66	45	60·6	46·7	53·2	− 2·8	78	0	3	0·26	−0·36	*	*
	Mullaghmore	63	50	58·3	50·9	54·3	− 3·1	86	0	4	0·04	−0·72	*	*
	Belmullet	59	50	57·1	51·0	53·8	− 2·0	83	0	3	0·10	?	*	*
	Markree Castle	65	47	58·8	48·7	53·4	− 4·3	80	0	2	0·04	−0·68	53	45
	Brookeborough	69	44	61·5	47·6	54·1	− 3·5	85	0	1	0·06	?	*	*
	Armagh	68	44	62·0	46·5	53·7	− 3·8	82	0	2	0·10	−0·41	52	44
	Donaghadee	65	46	59·1	48·1	53·1	− 3·3	78	0	2	0·05	−0·43	*	*
	Edgeworthstown	69	43	63·4	46·7	54·5	− 2·5	88	0	0	—	−0·79	*	*
10. IRELAND, S.	Dublin	72	48	65·1	50·4	57·2	− 0·1	106	0	1	0·08	−0·38	55	47
	Parsonstown	72	46	65·0	48·4	56·1	− 1·1	99	0	1	0·03	−0·55	47	40
	Kilkenny	71	46	64·7	49·4	56·5	− 1·0	102	0	1	0·03	−0·53	*	*
	Waterford								0				*	*
	Roche's Point	70	48	66·3	51·1	58·1	− 0·9	113	0	0	—	−0·75	*	*
	Valencia	71	49	63·4	51·4	57·0	+ 0·3	105	0	2	0·02	−0·79	60	52
	Killarney	72	45	65·1	49·9	57·0	− 0·6	105	0	0	—	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	63	50	59·1	52·9	55·8	− 1·9	97	0	2	0·03	−0·43	*	*
	Jersey (Noirmont)	63	48	60·0	50·6	55·0	− 3·7	91	0	1	0·45	+0·02	72	64

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S. SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 26.] *New Series.* WEEK ENDING MONDAY, 28TH JUNE, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

DISTRICTS (See p. 104.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
			Averages of				For the Week.		Since December 29, 1885.			
	Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.												
0. SCOTLAND, NORTH	64	40	56·1	44·0	49·6	4 below.	53	0	484	−139	669	+159
1. SCOTLAND, EAST	71	40	63·4	45·6	53·9	3 below.	83	0	705	−163	734	+191
2. ENGLAND, N.E.	78	42	63·5	48·1	55·2	2 below.	92	0	678	−228	697	+215
3. ENGLAND, EAST	78	43	68·3	48·6	57·9	2 below.	111	0	919	−189	750	+243
4. MIDLAND COUNTIES	79	42	67·4	48·9	57·8	2 below.	111	0	934	−202	721	+217
5. ENGLAND, SOUTH	79	43	68·7	50·7	59·0	1 below.	119	0	1034	−182	590	+217
Principal Grazing, &c. Districts.												
6. SCOTLAND, WEST	65	40	58·4	47·0	52·3	4 below.	72	0	676	−261	579	+181
7. ENGLAND, N.W.	70	37	61·3	49·0	54·7	4 below.	89	0	789	−200	612	+229
8. ENGLAND, S.W.	80	41	65·9	49·7	57·2	2 below.	106	0	964	−218	490	+257
9. IRELAND, NORTH	71	36	60·5	47·8	53·7	4 below.	82	0	798	−219	492	+142
10. IRELAND, SOUTH	74	39	64·5	50·1	56·8	2 below.	104	0	983 *	−213	401	+162
— CHANNEL ISLANDS	70	51	63·8	52·9	58·0	1 below.	112	0	1084	−189	202	+109

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 104.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
	Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		tOths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.													
0. SCOTLAND, NORTH	6	6	1 more.	129	+18	16·2	− 0·1	46	37	724	+ 29	32	+ 2
1. SCOTLAND, EAST	2	1	4 less.	101	+10	12·5	+ 1·1	60	49	716	− 59	31	− 3
2. ENGLAND, N.E.	1	less than ½	5 less.	102	+12	12·5	+ 0·6	42	35	545	−146	24	− 6
3. ENGLAND, EAST	1	less than ½	5 less.	97	+ 6	10·2	− 1·1	56	49	713	−137	31	− 6
4. MIDLAND COUNTIES	1	less than ½	6 less.	99	+ 9	15·8	+ 2·7	46	39	598	−149	26	− 7
5. ENGLAND, SOUTH	1	less than ½	4 less.	93	+ 7	12·8	+ 0·1	62	54	728	− 63	32	− 3
Principal Grazing, &c. Districts.													
6. SCOTLAND, WEST	3	2	5 less.	105	+ 4	20·0	+ 1·9	35	29	600	−130	26	− 6
7. ENGLAND, N.W.	2	2	4 less.	103	+11	18·3	+ 3·4	40	34	596	−140	26	− 6
8. ENGLAND, S.W.	0	-	7 less.	103	+ 5	18·1	− 1·5	60	53	737	−121	33	− 5
9. IRELAND, NORTH	3	2	5 less.	108	− 4	17·9	+ 1·7	31	26	561	−157	25	− 6
10. IRELAND, SOUTH	1	1	6 less.	105	− 1	19·5	+ 0·5	42	36	652	−155	29	− 6
— CHANNEL ISLANDS	0	-	5 less.	118	+12	15·1	+ 0·2	76	68	888	−127	39	− 6

General Remarks.

Weather has been fair and dry in most parts of the Kingdom, but until towards the end of the period it continued cool and somewhat cloudy.

Temperature has again been below the mean, the deficit ranging from 1° in "England, S." and the "Channel Islands", to 4° in the north and west of Scotland and the north-west of England. The highest of the maxima, which were generally recorded on the 28th, ranged from 80° in "England, S.W." and 78° or 79° over eastern, southern, and central England, to 70° in "England, N.W." and the "Channel Islands", and 64° in "Scotland, N." The lowest of the minima, which were registered on the 23rd or 24th in most parts of Great Britain, and on the 27th in Ireland, ranged from 36° in "Ireland, N.", 37° in "England, N.W.", and 39° in "Ireland, S.", to between 40° and 43° in England and Scotland, and to 51° in the "Channel Islands".

Rainfall has been very slight, excepting in "Scotland, N.", where the amount has been a little more than the mean. At many of the English stations no rain whatever has fallen.

Bright sunshine has been more prevalent than it was last week, excepting over Ireland and the west of Scotland. The percentages of the possible amount of duration ranged from 26 in "Ireland, N." and 29 in "Scotland, W.", to 53 in "England, S.W.", 54 in "England, S.", and to 68 in the "Channel Islands."

Depressions observed.—The only depressions which appeared in our area during this period were some rather large but shallow ones which were shown over Scandinavia and off our extreme northern coasts, while the barometer was generally highest to the southward of our Islands. Light or moderate breezes from the Westward were consequently most prevalent over the United Kingdom, but towards the end of the time the wind became very light and variable.

* This value has been altered slightly owing to the receipt of some arrears of observations from Waterford.

E 22731. 350.—7/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

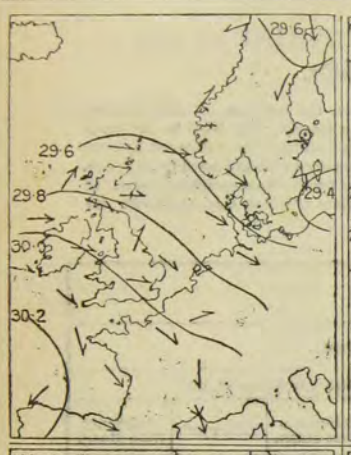
Weather

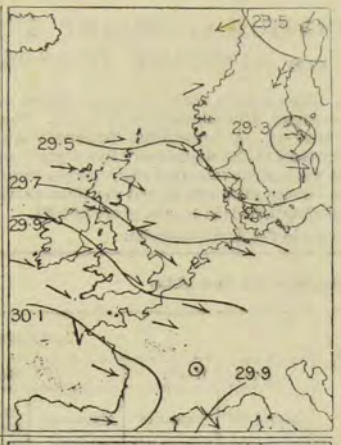
During the 24 hours succeeding 8 a.m. on the dates given.

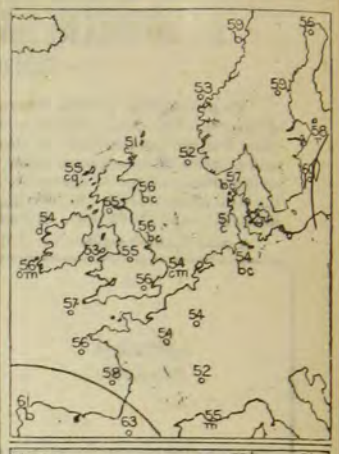
Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.







Tuesday, June 22.

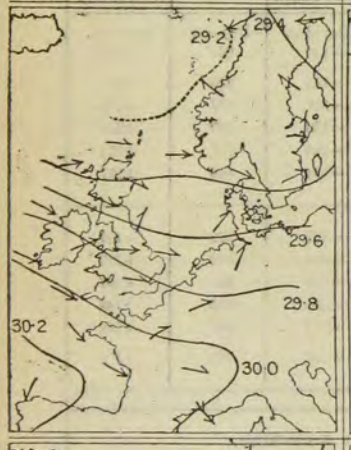
Weather fine in Denmark and the east of Great Britain, but cloudy or overcast elsewhere, with drizzling rain in the north of Ireland. A little rain falling later at all but our eastern stations.

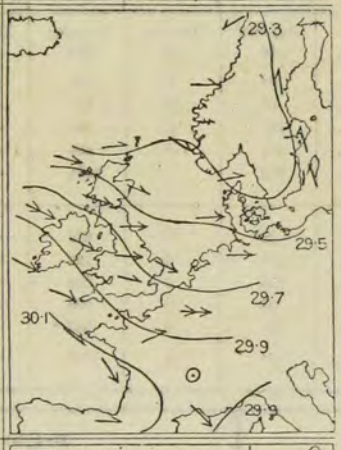
Temperature risen a little generally; readings over our Islands ranging from 58° at Leith to 51° at Sumburgh Head.

Wind Westerly or South Westerly on our northern coasts, but North-Westerly elsewhere; moderate to fresh in force generally.

Sea moderate to smooth.

Barometer rising a little in France, but falling elsewhere. Pressure highest over the Bay of Biscay, with areas of low readings over Scandinavia and to the northward of our Islands.





Wednesday, June 23.

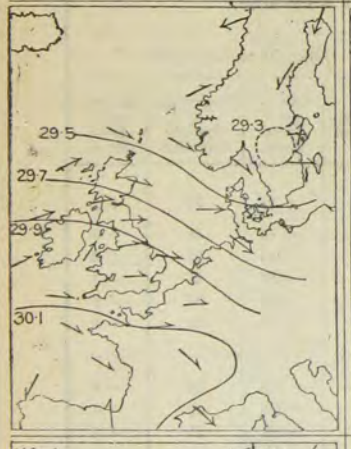
Weather fine at most of our eastern and southern stations, but cloudy elsewhere, with rain at Paris and showers on our extreme north-west coasts.

Temperature fallen a few degrees in Scandinavia and the north of our Islands, but risen elsewhere; readings ranging from 60° at Valencia and in London to 48° at Nairn.

Wind Easterly in the north of Scandinavia and South-Westerly in Sweden and Denmark, but Westerly elsewhere; strong in force on our west and north-west coasts.

Sea rather rough on our extreme north-west coasts and also at Scilly, but moderate to smooth elsewhere.

Barometer falling generally—most in the north. Pressure highest over the Bay of Biscay, with large area of low readings lying to the northward of our Islands. Rise taking place in west and north later.



Thursday, June 24.

Weather fine in Denmark and the south of our Islands, but cloudy elsewhere, with rain in the west of Norway, and passing showers at Nairn and Malin Head. Rain falling later at most of our north-western and extreme northern stations.

Temperature fallen slightly in Norway and the south of England, but risen elsewhere; readings ranging from 60° at Valencia and 59° at Roche's Point and in London, to 49° at Sumburgh Head and Wick. Subsequently rising to 70° at Loughborough and Cambridge, and 72° in London.

Wind North-Easterly in the north of Scandinavia, but Westerly in nearly all other parts of Western Europe; light in force in the south, but fresh or strong in the north. Subsequently backing to the South-Westward over the United Kingdom.

Sea rather rough on our extreme western coasts, but moderate to smooth elsewhere.

Barometer rising generally. Pressure highest over the southern part of the Bay of Biscay, with a large area of low readings over Scandinavia. New low pressure system appearing to the northward of our Islands later.

Friday, June 25.

Weather dull on the west coasts of Ireland and France, but fair or fine elsewhere. Showers falling later in the extreme north and north-west.

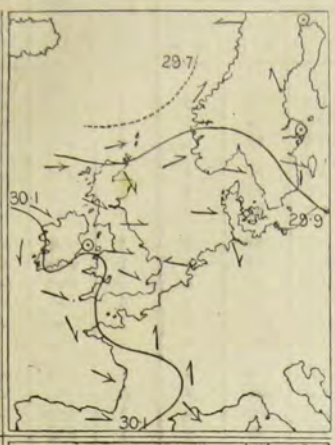
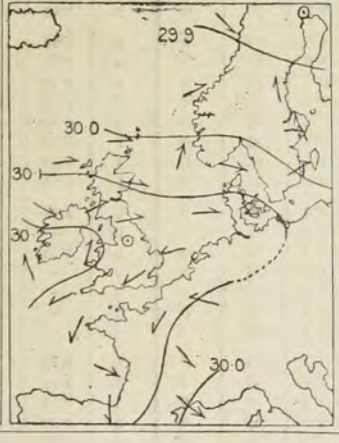
Temperature risen a little in most places; readings ranging from 62° in London and at Cambridge to 49° in the Shetlands. Subsequently rising to 72° in London and to 73° at Oxford and Cambridge.

Wind Easterly in the west and south of France, but Westerly or South-Westerly elsewhere; light to fresh in force generally. Subsequently shifting to West or North-West in the west of France.

Sea rather rough at Stornoway, moderate to smooth elsewhere.

Barometer rising at all but our south-western and the French stations. Pressure highest in France, with a large area of low readings to the northward of our Islands. Shallow depressions appearing over France later.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, June 26.** *Weather* dull in France and the north-west of our Islands, with rain in a few places, but fine elsewhere. *Temperature* fallen slightly in the west and north, but risen in the south; readings ranging from 63° at Cambridge to 50° in the Shetlands. Subsequently rising to 71° at Loughborough, 75° at Cambridge, and 77° in London. *Wind* Westerly or South-Westerly at all but our southern and the French stations—where light and variable; strong in force in the north of Scotland. Subsequently veering to North-West in many parts of our Islands. *Sea* rather rough at Stornoway and moderate off the north of Scotland, but smooth elsewhere. *Barometer* rising generally. Pressure highest in Spain, with a large area of low readings to the northward of our Islands, and some shallow depressions over France. Rise continuing all day and shallow depressions filling up.	
		Sunday, June 27. *Weather* cloudy at some of the extreme northern stations, with rain at Christiansund, but fine elsewhere. *Temperature* changed rather irregularly; readings varying from 65° at Prawle Point and 64° in London and at Jersey to 51° in the Shetlands. Highest maxima 74° at Loughborough and Hurst Castle, 72° in London, and 71° at Oxford and Cambridge. *Wind* moderate South-Westerly on our northern coasts, but North-Easterly or Easterly at our southern and the French stations. *Sea* moderate to smooth. *Barometer* rising generally. Large anticyclone lying over England, Ireland, and France, with relatively low pressures over the north of Scandinavia. Slight fall taking place in west and north later.	
		**Monday, June 28.** *Weather* dull and rainy in the extreme north of our islands as well as at Valencia, but fair or fine elsewhere. Improvement taking place at Valencia later. *Temperature* risen at all but the Swedish stations; readings ranging from 65° at Prawle Point, Oxford, and in London, to 49° in the Shetlands. Subsequently rising to 74° at Oxford, 75° at York and in London, and 78° at Loughborough and Cambridge. *Wind* moderate South-Westerly on our northern coasts, and North-Westerly in Sweden, but North-Easterly at our southern and the French stations. *Sea* rather rough at Stornoway, moderate to smooth elsewhere. *Barometer* falling a little in France and the north of our Islands, but falling elsewhere. Large anticyclone lying over the United Kingdom, France and the North Sea, with a shallow depression to the northward of our Islands. Depression subsequently moving eastwards, and barometer rising in north.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 101 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	55	40	54·0	43·7	48·5	− 3·8	46	0	7	0·78	+0·30	*	*
	Stornoway	58	42	55·0	44·7	49·9	− 3·6	55	0	7	0·78	+0·08	46	37
	Wick	64	40	58·3	43·6	50·4	− 3·3	59	0	5	0·35	−0·08	*	*
1. SCOTLAND, E.	Nairn	64	41	60·9	44·7	52·2	− 3·8	71	0	4	0·22	−0·25	*	*
	Aberdeen	70	41	66·1	44·4	54·8	− 1·4	90	0	2	0·11	−0·36	60	49
	Leith	71	40	63·1	47·6	54·8	− 2·2	90	0	0	—	−0·47	*	*
2. ENGLAND, N.E.	Alnwick Castle	70	42	61·7	47·6	54·2	− 2·3	85	0	1	0·01	−0·47	*	*
	Durham	78	42	66·3	46·1	55·5	− 1·9	95	0	1	0·02	−0·48	44	37
	Shields	70	42	63·1	46·9	54·4	− 2·8	87	0	2	0·06	−0·41	*	*
	Scarborough ⚓	67	45	62·4	49·3	55·4	− 1·8	94	0	0	—	−0·56	*	*
	York	75	42	66·0	48·4	56·6	− 2·3	102	0	0	—	−0·57	39	33
	Spurn Head	64	48	61·4	50·0	55·3	− 2·5	93	0	1	0·07	?	*	*
3. ENGLAND, E.	Hillington ⚓	77	43	69·1	47·0	58·3	− 0·6	114	0	1	0·01	−0·56	56	48
	Yarmouth	69	46	64·1	50·1	56·6	− 2·7	102	0	0	—	−0·50	*	*
	Geldeston	69	45	66·7	47·7	56·5	− 2·6	102	0	1	0·06	−0·36	52	45
	Cambridge	78	45	70·7	47·7	58·4	− 2·7	115	0	1	0·09	−0·47	61	53
	Rothamsted	77	44	69·4	49·9	59·0	− 1·9	119	0	1	0·04	−0·50	*	*
	Ingatestone	73	45	69·9	49·0	58·7	− 2·7	117	0	1	0·06	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	77	43	67·1	48·0	56·9	− 2·5	104	0	0	—	−0·60	34	29
	Loughborough	78	46	69·0	49·7	58·7	− 1·7	117	0	1	0·04	−0·51	*	*
	Leicester	77	47	67·6	49·4	57·9	− 2·9	111	0	1	0·03	−0·57	38	32
	Cheadle ⚓	72	45	64·7	48·1	55·8	− 3·0	97	0	1	0·06	−0·65	*	*
	Churchstoke ⚓	73	42	65·0	46·2	55·0	− 3·3	91	0	1	0·08	−0·47	36	31
	Hereford ⚓	79	47	72·5	50·0	60·5	+ 0·5	130	0	0	—	−0·52	*	*
	Cirencester	74	42	68·1	48·0	57·4	− 1·8	108	0	1	0·07	−0·55	59	51
	Oxford	74	49	69·4	51·6	59·9	− 0·1	125	0	1	0·03	−0·52	61	53
5. ENGLAND, S.	London†	77	47	71·7	52·6	61·5	− 0·3	137	0	1	0·05	−0·43	60	53
	Strathfield Turgiss ⚓	78	45	73·2	48·3	59·9	+ 0·5	125	0	1	0·07	−0·41	*	*
	Dungeness	68	48	64·1	50·3	56·7	− 3·4	103	0	1	0·09	−0·31	*	*
	Hastings (St. Leonard's)	71	47	65·8	51·7	58·3	− 1·1	114	0	0	—	−0·40	63	55
	Southampton	79	48	72·7	51·4	61·3	+ 1·2	135	0	1	0·02	−0·46	62	54
	Hurst Castle	74	49	67·1	52·0	59·0	− 0·1	119	0	1	0·03	−0·45	*	*
	Stowell ⚓	71	43	66·0	48·4	56·6	− 2·3	102	0	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	63	47	56·9	47·4	51·8	− 3·1	69	0	6	0·65	−0·61	*	*
	Glasgow	65	41	59·1	46·3	52·3	− 4·2	72	0	2	0·06	−0·67	32	26
	Ardrossan	60	42	57·9	47·3	52·2	− 4·5	71	0	2	0·09	−0·55	*	*
	Douglas (Isle of Man)	64	40	59·6	47·1	52·9	− 3·7	76	0	3	0·16	−0·41	38	32
7. ENGLAND, N.W.	Newton Reigny (Penrith)	70	39	61·1	45·1	52·5	− 4·0	74	0	4	0·24	−0·30	43	36
	Barrow-in-Furness	63	47	57·9	50·3	53·8	− 4·4	83	0	4	0·15	−0·47	*	*
	Stonyhurst	69	42	61·7	47·8	54·3	− 3·2	86	0	4	0·56	−0·32	46	39
	Blackpool ⚓	64	37	60·6	48·5	54·1	− 4·6	85	0	2	0·15	−0·43	32	27
	Manchester	70	43	63·3	48·7	55·5	− 3·6	95	0	2	0·25	−0·56	*	*
	Liverpool Obsy (Bidston)	68	49	63·0	51·0	56·6	− 2·6	102	0	1	0·08	−0·42	*	*
	Llandudno ⚓	67	48	62·7	50·1	55·9	− 3·1	97	0	1	0·13	−0·37	39	33
	Holyhead	63	48	59·7	50·1	54·6	− 3·1	88	0	1	0·13	−0·36	*	*
8. ENGLAND, S.W.	Llandovery	80	41	69·3	46·6	57·2	− 2·3	106	0	1	0·10	−0·67	*	*
	Pembroke	66	51	60·0	52·4	55·9	− 2·5	97	0	0	—	−0·50	64	56
	Arlington (N. Devon)	70	42	63·7	47·4	55·0	− 4·2	91	0	1	0·02	−0·96	*	*
	Cullompton ⚓	74	43	70·0	47·9	58·2	− 1·8	113	0	0	—	−0·61	52	46
	Falmouth	68	49	64·7	51·1	57·4	− 1·9	108	0	0	—	−0·67	58	51
	Plymouth	72	48	69·6	52·2	60·3	+ 0·1	128	0	0	—	−0·50	65	58
	Prawle Point	68	47	64·0	50·1	56·6	− 1·2	102	0	0	—	?	*	*
9. IRELAND, N.	Malin Head	62	41	57·1	47·6	52·0	− 3·7	70	0	4	0·23	?	*	*
	Londonderry	71	45	62·2	47·2	54·2	− 2·9	85	0	3	0·20	−0·46	*	*
	Mullaghmore	65	50	59·6	50·9	55·0	− 3·4	91	0	3	0·13	−0·65	*	*
	Belmullet	64	48	58·7	50·1	54·1	− 2·6	85	0	3	0·18	?	*	*
	Markree Castle	68	38	60·3	46·4	52·9	− 5·6	76	0	4	0·13	−0·60	30	25
	Brookeborough	71	36	60·9	45·8	52·8	− 5·9	76	0	0	—	?	*	*
	Armagh	71	42	61·7	47·1	53·9	− 4·6	83	0	4	0·10	−0·46	31	26
	Donaghadee	65	40	61·4	46·7	53·4	− 3·8	80	0	2	0·06	−0·43	*	*
	Edgeworthstown	70	42	62·4	47·9	54·7	− 3·5	89	0	3	0·37	−0·43	*	*
10. IRELAND, S.	Dublin	72	46	64·8	50·8	57·3	− 1·1	107	0	3	0·07	−0·40	42	36
	Parsonstown	72	39	64·6	48·7	56·1	− 1·9	99	0	1	0·04	−0·57	38	32
	Kilkenny	71	44	64·9	48·7	56·2	− 1·3	99	0	0	—	−0·53	*	*
	Waterford	74	45	66·6	48·6	57·0	− 2·6	105	0	0	—	−0·60	*	*
	Roche's Point	68	49	63·0	50·3	56·2	− 3·5	99	0	0	—	−0·75	*	*
	Valencia	66	51	63·6	52·9	57·9	+ 0·3	111	0	2	0·06	−0·79	46	40
	Killarney	71	46	63·9	50·5	56·7	− 1·9	103	0	2	0·16	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	67	53	64·0	53·7	58·5	− 0·2	116	0	0	—	−0·47	*	*
	Jersey (Noirmont)	70	51	63·6	52·1	57·5	− 2·2	109	0	0	—	−0·45	76	68

Stations marked ⚓ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY · WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 27.] *New Series.* WEEK ENDING MONDAY, 5TH JULY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 108.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	44	60·5	48·8	54·3	1 above.	86	0	570	−138	669	+159
	1. SCOTLAND, EAST	81	46	71·5	51·1	60·6	3 above.	130	0	835	−142	734	+191
	2. ENGLAND, N.E.	85	49	72·9	53·7	62·6	4 above.	144	0	822	−203	697	+215
	3. ENGLAND, EAST	86	42	74·9	51·3	62·3	1 above.	142	0	1061	−174	750	+243
	4. MIDLAND COUNTIES	85	46	78·2	53·5	65·0	5 above.	161	0	1095	−164	721	+217
	5. ENGLAND, SOUTH	89	44	75·7	53·1	63·6	3 above.	151	0	1185	−158	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	77	43	68·3	52·3	59·8	3 above.	125	0	801	−244	579	+181
	7. ENGLAND, N.W.	79	46	70·6	53·4	61·4	2 above.	136	0	925	−178	612	+229
	8. ENGLAND, S.W.	88	45	75·3	53·8	63·8	4 above.	153	0	1117	−182	490	+257
	9. IRELAND, NORTH	81	45	71·2	53·5	61·7	3 above.	138	0	936	−190	492	+142
	10. IRELAND, SOUTH	84	46	75·3	53·7	63·7	5 above.	152	0	1135	−175	401	+162
	— CHANNEL ISLANDS	77	53	71·1	56·8	63·4	3 above.	150	0	1234	−160	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 108.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	6	1 more.	132	+16	16·8	0·0	25	20	749	+ 21	31	+ 1
	1. SCOTLAND, EAST	1	1	4 less.	102	+ 6	12·6	+ 0·7	41	34	757	− 52	31	− 2
	2. ENGLAND, N.E.	0	–	5 less.	102	+ 9	12·5	0·0	65	55	610	−123	26	− 4
	3. ENGLAND, EAST	0	–	5 less.	97	+ 2	10·1 *	− 1·7	83	72	796	−109	33	− 5
	4. MIDLAND COUNTIES	0	–	6 less.	99	+ 5	15·8	+ 2·2	78	67	676	−119	28	− 5
	5. ENGLAND, SOUTH	0	–	5 less.	93	+ 3	12·8	− 0·3	87	77	815	− 27	34	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	1	1	7 less.	106	0	20·1	+ 1·3	70	59	670	− 95	28	− 4
	7. ENGLAND, N.W.	0	–	7 less.	103	+ 6	18·3	+ 2·7	75	64	671	−104	28	− 4
	8. ENGLAND, S.W.	0	–	7 less.	103	0	18·1	− 2·2	90	80	827	− 78	36	− 2
	9. IRELAND, NORTH	1	1	6 less.	109	− 8	18·0	+ 1·1	58	50	619	−122	26	− 5
	10. IRELAND, SOUTH	0	–	6 less.	105	− 6	19·5	− 0·2	81	70	733	−101	31	− 4
	— CHANNEL ISLANDS	0	–	5 less.	118	+ 7	15·1	− 0·3	99	89	987	− 80	42	− 2

General Remarks.

Weather has been fine and bright in almost all parts of the Kingdom, but cloudy and somewhat showery in the extreme north of Scotland.

Temperature has been above the mean in all districts, the excess varying from 1° in "Scotland, N." and "England, E." and 2° in "England, N.W.", to 4° in "England, N.E." and "England, S.W." and 5° in the "Midland Counties" and "Ireland, S." The highest of the maxima, which were generally registered on the 3rd or 4th in England and on earlier dates in Ireland and Scotland, were as high as from 85° to 89° over the greater part of England, 81° to 84° in Ireland, and 69° to 81° in Scotland. The lowest of the minima, which were registered during the earlier part of the week, ranged from 42° in "England, E." to 49° in "England, N.E." and to 53° in the "Channel Islands".

Rainfall has been slightly more than the mean in "Scotland, N.", but in most other districts rain has been entirely absent.

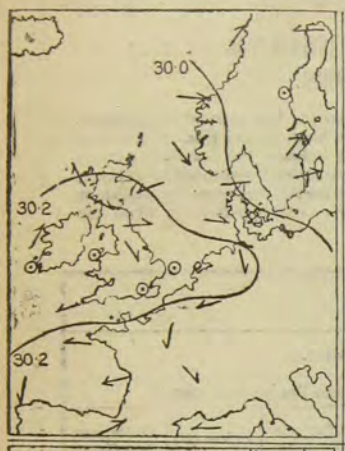
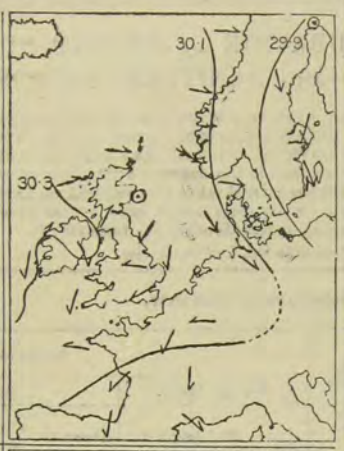
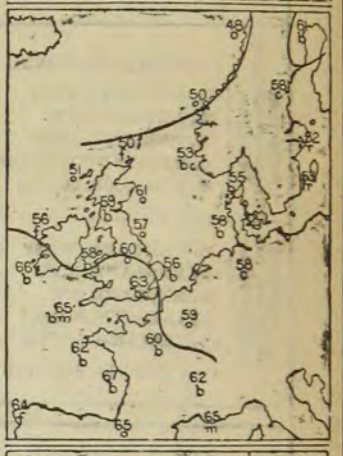
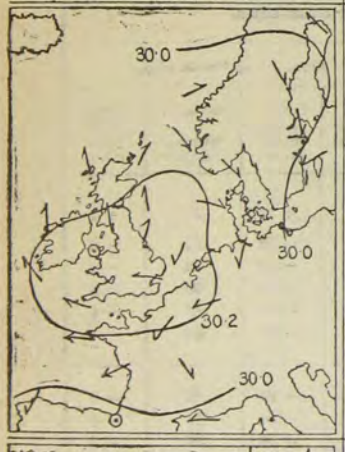
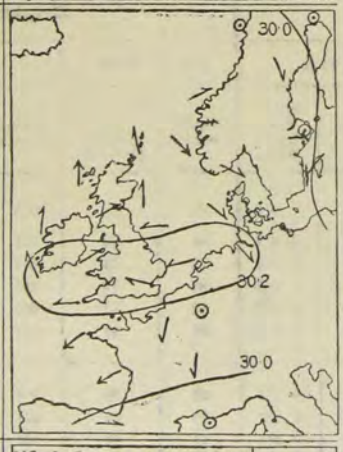
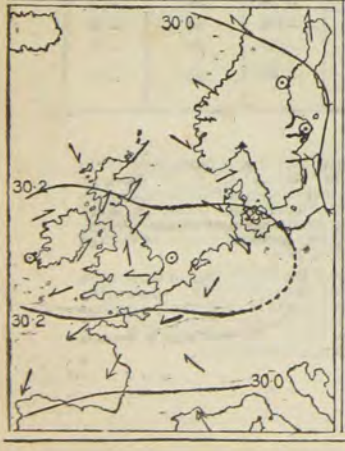
Bright sunshine shows a decrease in the extreme north and east of Scotland, but a very considerable increase elsewhere. The percentages of the possible amount of duration over England and the "Channel Islands" were very high, ranging from 55° in "England, N.E." and 64 in "England, N.W.", to 77 in "England, S.", 80 in "England, S.W.", and 89 in the "Channel Islands". The highest percentages at individual stations were 89 at Jersey, 88 at Hastings, 86 at Falmouth, and 85 at Pembroke. These figures are higher than any which have been recorded since the commencement of the "Bright sunshine" returns in April 1880. The highest percentages previously recorded were 83 at York and 85 at Geldeston, for the week ending 22nd May 1882.

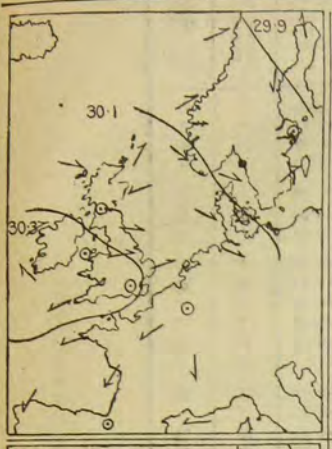
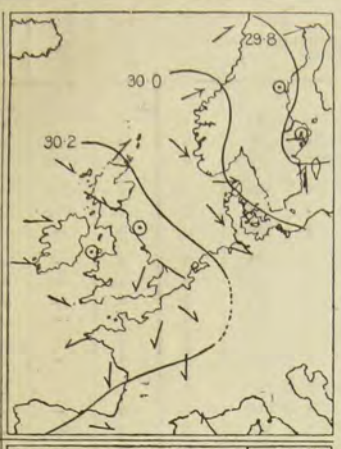
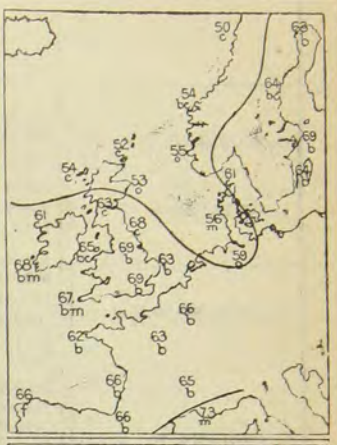
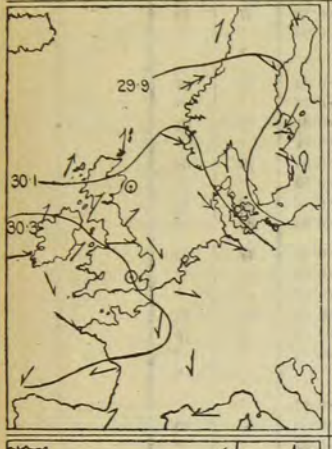
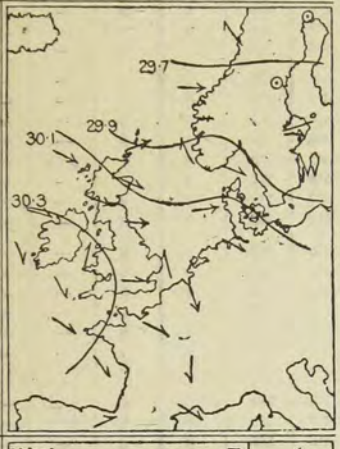
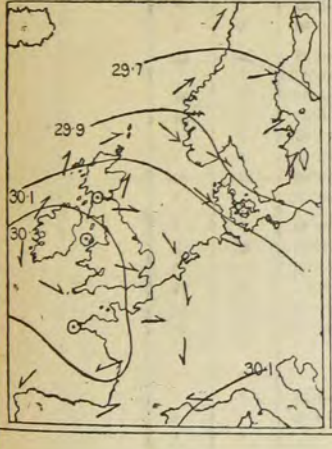
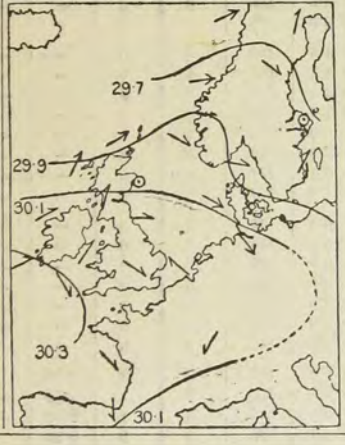
Depressions observed.—During the whole of this period the distribution of barometric pressure over our Islands was anticyclonic, and the only depressions which appeared in our area were some large but shallow disturbances which passed in an Easterly direction outside our northern coasts. The winds over the United Kingdom were consequently light and variable, but at our northern stations Westerly or South-Westerly breezes generally prevailed, and in the south light Easterly or North-Easterly airs.

* This value has been altered slightly owing to an error in a recent Return from Geldeston.

B 22816. 350.—7/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, June 29.** *Weather* dull and misty at several of our northern stations, but fair or fine elsewhere. Slight rain falling in the extreme north later. *Temperature* changed irregularly; readings ranging from 68° at Prawle Point and 67° at Shields to 51° at Stornoway and Aberdeen. Subsequently rising to 76° at York, 78° at Loughborough and in London, and 79° at Cambridge. *Wind* strong from North-West on the eastern shores of the North Sea, and light or moderate from East or North-East in France and the south of England, but variable elsewhere. *Sea* smooth generally. *Barometer* rising at all but the Swedish and Danish stations. Large anticyclone lying over our Islands, with relatively low pressures in Sweden. No important change later.	
		Wednesday, June 30. *Weather* dull and foggy in the extreme north and north-west of our Islands, and rainy in the south of Sweden, but fine elsewhere. *Temperature* fallen a little at our eastern, southern, and many of the Continental stations, but risen elsewhere; readings over our Islands ranging from 68° at Prawle Point to 50° in the Shetlands. Subsequently rising to 75° at York, 76° at Loughborough, and 78° at Parsonstown. *Wind* fresh or strong from North-West or North in Denmark and the south of Scandinavia, and light from East or North-East at our eastern, southern, and many of the Continental stations, but variable on our western and northern coasts. *Sea* smooth generally. *Barometer* rising in most places. Large anticyclone still lying over our Islands, with an area of low pressure over the Baltic. Slight fall taking place over the United Kingdom later.	
		**Thursday, July 1.** *Weather* dull in the west of Norway with rain at Bödo, but fine elsewhere. *Temperature* fallen a little in France and the south of our Islands, but risen elsewhere; readings ranging from 71° at Parsonstown to 54° at Spurn Head. Subsequently rising to 78° at Leith, 79° at Parsonstown, 80° at Nairn, and 81° at Loughborough. *Wind* light South-Easterly or Southerly in Ireland and Scotland, but North-Westerly on the eastern shores of the North Sea, and Easterly at our southern and the French stations. *Sea* rather rough at Valencia, but smooth elsewhere. *Barometer* falling on our western and northern coasts, but rising in most other localities. Anticyclone lying over our Islands and the north of France, with low pressure system over the Baltic. Fall taking place generally later.	
		**Friday, July 2.** *Weather* dull in the north of Scotland, but fine in nearly all other parts of Western Europe. *Temperature* fallen a little in the west but risen rapidly in the north-east; readings ranging from 75° at Aberdeen to 54° at Sumburgh Head and Yarmouth and 53° at Stornoway. Subsequently rising to 81° at Aberdeen, 82° at Cambridge, 83° at Loughborough, and 85° at York. *Wind* light Westerly on our northern coasts, but Easterly or North-Easterly at our southern and the French stations. *Sea* smooth generally. *Barometer* rising at all but our extreme northern stations. Long band of high pressure extending from Germany to our western coasts. Rise taking place in north later.	

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, July 3.** *Weather* dull at some of the Scotch stations, but fine elsewhere. *Temperature* fallen in the north, but risen in most other localities; readings ranging from 71° at Loughborough and Liverpool to 52° in the Shetlands. Subsequently reaching 82° at York, 83° in London, 84° at Loughborough, and 86° at Cambridge. *Wind* light Westerly on our north and east coasts, and fresh North-Westerly on the eastern shores of the North Sea, but North-Easterly at our extreme southern and the French stations. *Sea* smooth generally. *Barometer* rising at all but the Swedish and Danish stations. Large anticyclone lying over our Islands and the greater part of France, with relatively low pressures in the north of Sweden. No important change later.	
		**Sunday, July 4.** *Weather* dull in the north and north-west of our Islands, with rain at Sumburgh Head, Stornoway, and Malin Head, but fine elsewhere. *Temperature* fallen a few degrees in Scandinavia, but risen over our Islands and France; readings ranging from 72° at Loughborough, Liverpool, and Prawle Point to 49° in the Shetlands. Subsequently rising to 82° at York, 84° at Oxford, 85° at Loughborough and Cambridge, and 86° in London. *Wind* moderate or fresh South-Westerly over our extreme north and north-west coasts and strong North-Westerly on the eastern shores of the North Sea, but light or moderate from between North and East in France. *Sea* moderate to smooth. *Barometer* rising at our southern and the French stations, but falling elsewhere. Anticyclone lying over our west and south-west coasts, and depression approaching the north of Scotland. Depression subsequently moving eastwards and barometer rising again in north-west.	
		**Monday, July 5.** *Weather* dull in the extreme north-west and north, but fine elsewhere. Showers falling later on our northern coasts. *Temperature* risen in Sweden and Denmark, but fallen elsewhere; readings ranging from 73° at Hurst Castle to 50° at Sumburgh Head. Subsequently rising to 76° at Loughborough, 77°, at Oxford, 78° at Hurst Castle, and 81° in London and at Cambridge. *Wind* light or moderate South-Westerly in the north of our Islands and strong from the same quarter in the west of Norway, but light from North-West or North on our south coasts. *Sea* rather rough at Sumburgh Head, slight or smooth elsewhere. *Barometer* falling generally. Anticyclone still lying over our west and south-west coasts, with a depression over the north of Scandinavia. Fall continuing all day.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟩⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 105 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	59	44	55·3	47·0	50·9	− 2·0	62	0	5	1·20	+0·72	*	*
	Stornoway	69	44	61·7	48·6	54·7	+ 0·7	89	0	3	0·43	−0·27	25	20
	Wick	68	46	64·4	50·9	57·2	+ 2·8	106	0	2	0·30	−0·15	*	*
1. SCOTLAND, E.	Nairn	80	46	69·9	50·9	59·7	+ 2·9	124	0	2	0·19	−0·30	*	*
	Aberdeen	81	49	71·6	50·6	60·4	+ 3·6	129	0	1	0·02	−0·43	41	34
	Leith	80	49	73·1	51·9	61·8	+ 3·8	139	0	0	—	−0·51	*	*
2. ENGLAND, N.E.	Alnwick Castle	76	49	70·4	53·0	61·1	+ 4·0	134	0	0	—	−0·50	*	*
	Durham	83	49	78·6	53·4	65·1	+ 6·7	162	0	0	—	−0·54	62	52
	Shields	80	50	72·7	53·3	62·3	+ 4·2	142	0	0	—	−0·49	*	*
	Scarborough ‡	81	51	71·1	55·2	62·6	+ 4·0	144	0	0	—	−0·60	*	*
	York	85	50	78·4	54·0	65·4	+ 5·4	164	0	0	—	−0·58	68	58
	Spurn Head	73	50	66·4	53·0	59·2	+ 0·2	120	0	0	—	?	*	*
3. ENGLAND, E.	Hillington ‡	84	46	78·1	52·5	64·4	+ 4·7	157	0	0	—	−0·59	77	66
	Yarmouth	70	50	64·6	52·9	58·3	− 2·0	114	0	0	—	−0·53	*	*
	Geldeston	83	42	73·6	49·4	60·7	+ 0·8	131	0	0	—	−0·45	86	75
	Cambridge	86	44	80·3	50·7	64·5	+ 2·4	158	0	0	—	−0·54	87	76
	Rothamsted	83	43	76·3	51·1	62·8	+ 1·1	146	0	0	—	−0·56	*	*
	Ingatestone	84	45	76·5	51·1	62·9	+ 0·8	146	0	0	—	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	82	48	79·0	53·7	65·5	+ 5·1	165	0	0	—	−0·62	73	63
	Loughborough	85	46	80·4	54·0	66·3	+ 4·9	170	0	0	—	−0·53	*	*
	Leicester	85	47	79·8	54·5	66·3	+ 4·6	170	0	0	—	−0·61	71	61
	Cheadle ‡	79	48	74·1	53·5	63·1	+ 3·6	148	0	0	—	−0·71	*	*
	Churchstoke ‡	82	48	77·5	51·2	63·4	+ 4·2	150	0	1	0·01	−0·54	79	68
	Hereford ‡	84	51	80·6	54·1	66·4	+ 5·5	171	0	0	—	−0·52	*	*
	Cirencester	82	47	77·1	52·1	63·7	+ 3·7	152	0	0	—	−0·64	82	72
	Oxford	84	48	77·4	55·1	65·5	+ 4·9	165	0	0	—	−0·56	83	73
5. ENGLAND, S.	London†	86	50	79·1	53·6	65·5	+ 2·8	165	0	0	—	−0·48	77	68
	Strathfield Turgiss ‡	87	44	81·0	49·6	64·2	+ 3·9	155	0	0	—	−0·50	*	*
	Dungeness	74	47	68·4	54·3	60·9	+ 0·2	132	0	0	—	−0·40	*	*
	Hastings (St. Leonard's)	76	47	70·7	54·2	61·9	+ 1·8	139	0	0	—	−0·41	100	88
	Southampton	89	49	81·1	53·7	66·4	+ 5·7	171	0	0	—	−0·50	85	75
	Hurst Castle	78	50	73·1	53·6	62·7	+ 2·8	145	0	0	—	−0·48	*	*
	Stowell ‡	80	48	76·4	52·7	63·7	+ 4·0	152	0	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	76	47	65·0	51·3	57·7	+ 1·1	110	0	2	0·51	−0·79	*	*
	Glasgow	77	51	70·4	54·2	61·7	+ 4·6	138	0	1	0·06	−0·69	55	46
	Ardrossan	69	51	66·6	53·9	59·8	+ 2·5	125	0	0	—	−0·65	*	*
	Douglas (Isle of Man)	75	43	71·3	49·8	59·8	+ 3·0	125	0	0	—	−0·60	84	72
7. ENGLAND, N.W.	Newton Reigny (Penrith)	77	47	73·1	50·4	61·0	+ 3·6	133	0	0	—	−0·58	75	63
	Barrow-in-Furness	69	53	66·7	55·6	60·8	+ 2·1	132	0	0	—	−0·65	*	*
	Stonyhurst	76	50	71·8	53·1	61·8	+ 3·4	139	0	0	—	−0·94	68	58
	Blackpool ‡	72	46	67·7	50·0	58·2	− 1·2	113	0	0	—	−0·64	74	63
	Manchester	79	51	74·5	53·3	63·2	+ 3·6	148	0	0	—	−0·85	*	*
	Liverpool Obsy (Bidston)	74	52	70·6	56·1	62·9	+ 3·0	146	0	0	—	−0·57	*	*
	Llandudno ‡	78	52	72·2	54·7	62·8	+ 3·1	146	0	0	—	−0·55	81	70
	Holyhead	72	51	68·0	53·7	60·4	+ 1·9	129	0	0	—	−0·50	*	*
8. ENGLAND, S.W.	Llandovery	88	45	84·1	49·0	65·3	+ 5·3	163	0	0	—	−0·80	*	*
	Pembroke	71	53	69·4	57·1	62·8	+ 3·6	146	0	0	—	−0·51	97	85
	Arlington (N. Devon)	77	50	75·4	52·6	63·2	+ 2·9	148	0	0	—	−1·00	*	*
	Cullompton ‡	84	46	79·8	49·7	63·7	+ 2·9	152	0	0	—	−0·62	80	71
	Falmouth	77	54	72·2	56·6	63·9	+ 4·2	153	0	0	—	−0·58	96	86
	Plymouth	83	50	74·9	55·0	64·3	+ 3·3	156	0	0	—	−0·52	86	77
	Prawle Point	77	52	71·6	56·6	63·6	+ 4·8	151	0	0	—	?	*	*
9. IRELAND, N.	Malin Head	73	50	64·7	53·6	58·8	+ 2·6	118	0	3	0·19	?	*	*
	Londonderry	81	51	73·8	54·8	63·6	+ 6·1	151	0	1	0·16	−0·54	*	*
	Mullaghmore	77	54	68·9	57·4	62·8	+ 3·7	146	0	1	0·12	−0·70	*	*
	Belmullet	73	51	67·3	56·6	61·6	+ 4·5	137	0	2	0·10	?	*	*
	Markree Castle	79	45	72·3	50·7	60·8	+ 1·6	132	0	2	0·23	−0·50	54	46
	Brookeborough	80	48	75·1	52·1	62·8	+ 3·3	146	0	1	0·06	?	*	*
	Armagh	77	49	73·8	53·1	62·7	+ 3·5	145	0	1	0·01	−0·61	62	53
	Donaghadee	76	46	68·9	50·4	59·0	+ 1·3	119	0	0	—	−0·51	*	*
	Edgeworthstown	78	52	75·7	53·1	63·6	+ 4·4	151	0	0	—	−0·82	*	*
10. IRELAND, S.	Dublin	79	55	75·2	57·8	65·9	+ 6·5	167	0	0	—	−0·48	80	69
	Parsonstown	79	52	76·7	53·4	64·2	+ 5·5	155	0	0	—	−0·63	78	67
	Kilkenny	81	50	77·0	53·1	64·2	+ 5·0	155	0	0	—	−0·53	*	*
	Waterford	84	49	78·0	52·9	64·6	+ 4·5	158	0	0	—	−0·61	*	*
	Roche's Point	74	51	72·6	53·6	62·4	+ 2·2	143	0	0	—	−0·74	*	*
	Valencia	75	50	72·1	53·6	62·2	+ 4·0	141	0	2	0·03	−0·84	86	75
	Killarney	78	46	75·4	51·4	62·6	+ 3·5	144	0	0	—	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	75	56	70·1	57·6	63·4	+ 3·7	150	0	0	—	−0·48	*	*
	Jersey (Noirmont)	77	53	72·0	56·0	63·4	+ 2·8	150	0	0	—	−0·48	99	89

Stations marked ‡ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 28.] *New Series.* WEEK ENDING MONDAY, 12TH JULY, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 112.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	65	33	57·4	44·9	50·8	4 below.	62	0	632	−163	669	+159
	1. SCOTLAND, EAST	71	37	65·2	48·7	56·4	1 below.	101	0	936	−149	734	+191
	2. ENGLAND, N.E.	75	42	65·5	50·9	57·7	2 below.	110	0	932	−213	697	+215
	3. ENGLAND, EAST	87	40	69·9	50·4	59·5	2 below.	123	0	1184	−180	750	+243
	4. MIDLAND COUNTIES†	83	43	70·5	52·3	60·8	1 below.	132	0	1227	−153	721	+217
	5. ENGLAND, SOUTH†	85	44	70·1	53·3	61·1	0 (average).	134	0	1319	−155	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	65	38	61·1	49·7	55·0	2 below.	91	0	892	−260	579	+181
	7. ENGLAND, N.W.†	74	40	63·5	51·6	57·2	2 below.	106	0	1031	−184	612	+229
	8. ENGLAND, S.W.	83	35	67·7	52·4	59·5	1 below.	123	0	1240	−174	490	+257
	9. IRELAND, NORTH	70	41	62·6	50·6	56·2	3 below.	99	0	1035	−194	492	+142
	10. IRELAND, SOUTH	75	42	65·9	51·5	58·2	2 below.	113	0	1247 *	−173	401	+162
	— CHANNEL ISLANDS	76	50	66·4	55·8	60·8	0 (average)	132	0	1366	−150	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 112.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	5	0 (average).	138	+18	17·3	− 0·1	41	34	790	+ 31	31	+ 1
	1. SCOTLAND, EAST	4	3	3 less.	106	+ 6	12·9	+ 0·5	53	44	810	− 43	32	− 2
	2. ENGLAND, N.E.	3	1	5 less.	105	+ 8	12·6	− 0·5	42	36	652	−130	26	− 5
	3. ENGLAND, EAST	4	8	3 more.	101	+ 2	10·9	− 1·5	41	36	837	−119	34	− 4
	4. MIDLAND COUNTIES†	3	4	2 less.	102	+ 4	16·2	+ 2·0	38	34	714	−125	29	− 4
	5. ENGLAND, SOUTH†	3	6	1 more.	96	+ 2	13·4	− 0·2	49	43	864	− 28	35	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	8	2 less.	110	− 1	20·9	+ 1·5	43	37	713	− 92	28	− 4
	7. ENGLAND, N.W.†	3	5	2 less.	106	+ 5	18·8	+ 2·5	45	38	716	−103	29	− 3
	8. ENGLAND, S.W.	3	3	2 more.	106	− 1	19·0	− 2·0	49	44	876	− 79	35	− 3
	9. IRELAND, NORTH	4	3	4 less.	113	− 9	18·3	+ 0·7	23	20	642	−134	26	− 4
	10. IRELAND, SOUTH	4	5	2 less.	109	− 7	20·0	− 0·3	28	24	761	−112	31	− 3
	— CHANNEL ISLANDS	3	4	1 less.	121	+ 6	15·5	− 0·4	68	62	1055	− 70	43	− 2

General Remarks.

Weather continued fine during the earlier days of the period, but subsequently became cloudy or dull, with a general, but not heavy, fall of rain.

Temperature has equalled the mean in "England, S." and the "Channel Islands", but in all other districts it has been below it, the deficit ranging from 1° in "Scotland, E.", the "Midland Counties", and "England, S.W.", to 3° in "Ireland, N." and 4° in "Scotland, N." The highest of the maxima, which were registered on the 6th over England and in most parts of Ireland and on the 11th in Scotland, ranged from 65° in the north and west of Scotland to 75° in "England, N.E." and "Ireland, S.", 76° in the "Channel Islands", and to 85° in "England, S." and 87° in "England, E." The lowest of the minima which were recorded either on the 9th or 10th, ranged from 33° in "Scotland, N.", 35° in "England, S.W.", 37° in "Scotland, E.", and 38° in "Scotland, W." to 44° in "England, S." and to 50° in the "Channel Islands".

Rainfall has been a little more than the mean in the south-west, south, and east of England, and equal to it in the north of Scotland, but in all other parts of the Kingdom it has been less than the normal value.

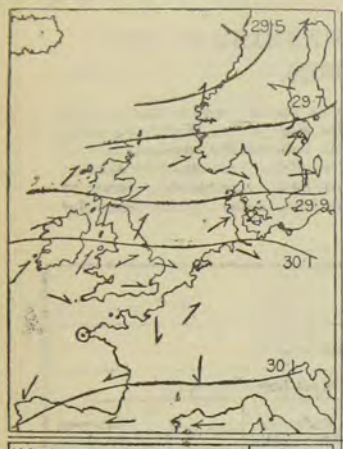
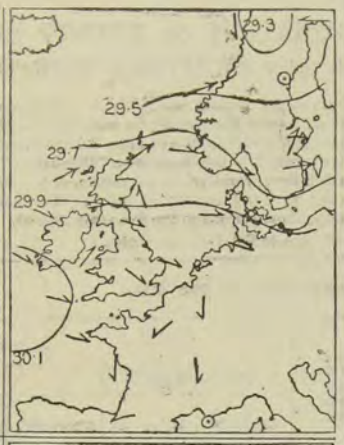
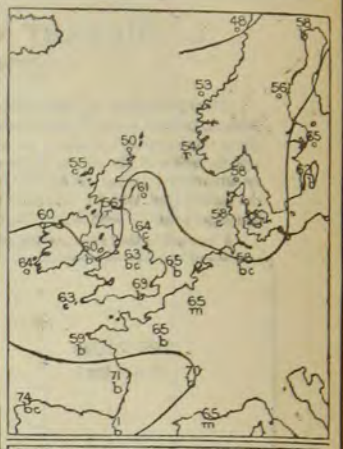
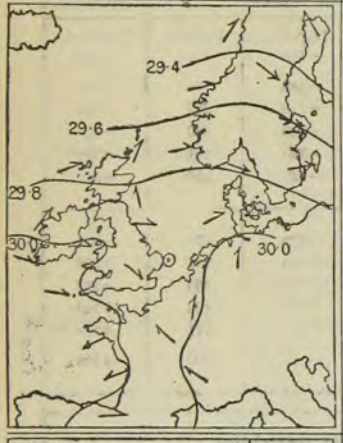
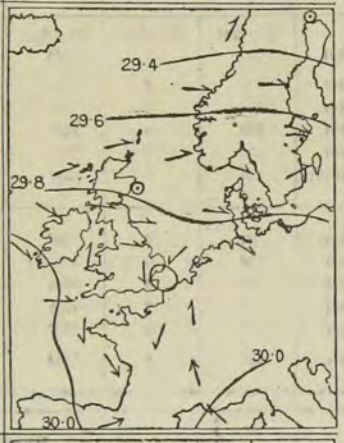
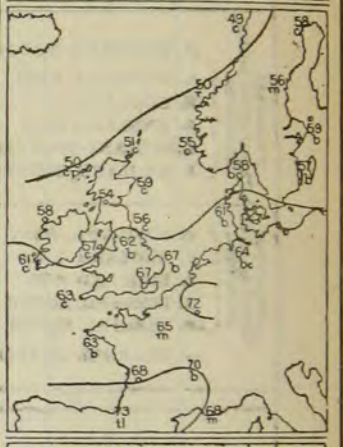
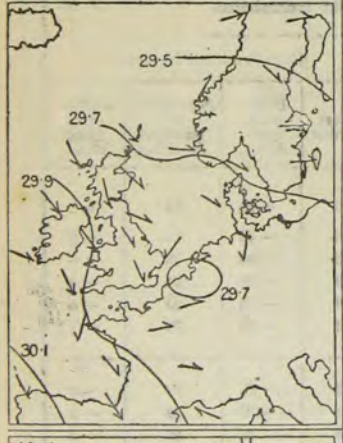
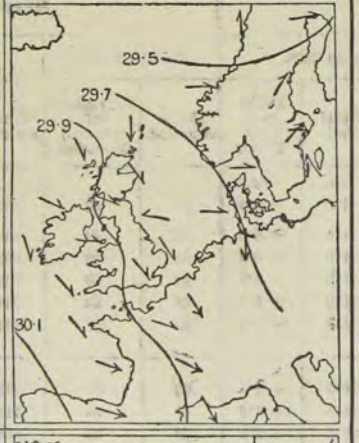
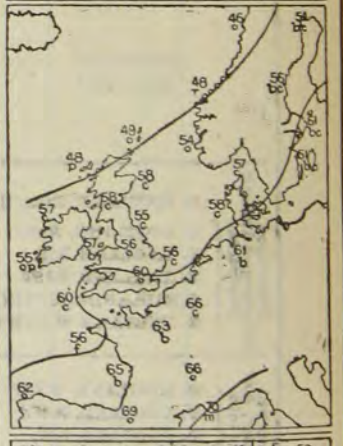
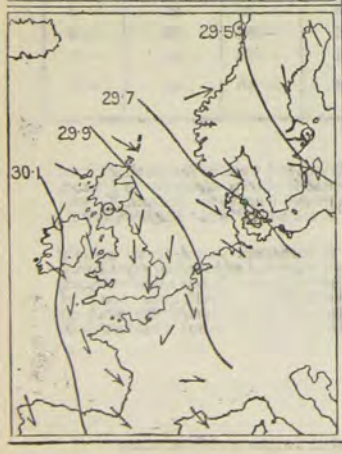
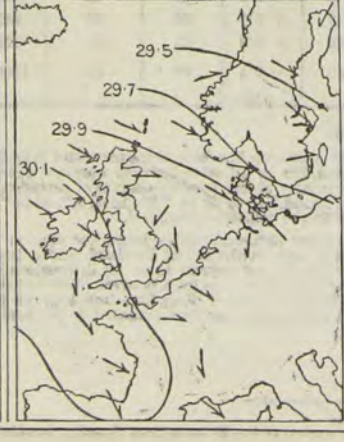
Bright sunshine has been more prevalent than it was last week in the north and east of Scotland, but in all other districts a decided decrease is shown, especially in Ireland. The percentages of the possible amount of duration ranged from 20 in "Ireland, N." and 24 in "Ireland, S." to 43 in "England, S.", 44 in "Scotland, E." and "England, S.W.", and to 62 in the "Channel Islands".

Depressions observed.—Some large, but shallow disturbances passed in an easterly direction to the northward of Scotland, and a few very small and shallow subsidiaries over our Islands, but beyond these no depressions have appeared in our neighbourhood. Light to moderate breezes from between West and North-West or North have been most general over the United Kingdom, but towards the end of the period the wind on our west and north-west coasts backed to the Southward and increased considerably in force.

* These figures have been altered slightly owing to an error in a recent Return from Killarney.
† The accumulated values in these districts are liable to alteration in consequence of the non-arrival of the Returns from Cheadle, Strathfield Turgiss, and Llandudno.

B 22909. 350.—7/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, July 6.** *Weather* dull at our northern and the Scandinavian stations, with rain locally, but fine elsewhere. Sky clearing in north later. *Temperature* risen a little over Ireland and England, but fallen in most other localities; readings ranging from 71° at Dungeness to 50° in the Shetlands. Subsequently rising to 82° at Loughborough and Oxford, 85° in London, and 87° at Cambridge. *Wind* Easterly in France and South-Easterly in the north of Scandinavia, but South-Westerly or Westerly elsewhere; light or moderate in force generally. Freshening from South-West on our extreme northern coasts later. *Sea* moderate to smooth. *Barometer* falling generally. Long band of high pressure extending from Central Europe to the Bay of Biscay and our south-west coasts, and large area of low readings lying off the west of Norway.	
		**Wednesday, July 7.** *Weather* cloudy and showery on our extreme north and north-west coasts, but fine elsewhere. Showers falling later in many parts of the United Kingdom. *Temperature* fallen a little; readings over our Islands ranging from 70° at Cambridge to 50° at Stornoway. Subsequently rising to 78° at Hurst Castle, 80° at Cambridge, and 83° in London. *Wind* moderate or fresh from West or South-West on our northern coasts, but light from North-West in the south-west and from South-East over the Netherlands and east of France. *Sea* moderate to smooth. *Barometer* falling generally. Band of high pressure noticed on previous day now separated by a "col" lying over Central France and the south-east of England. Shallow but well-defined depression formed over our south-eastern stations later.	
		**Thursday, July 8.** *Weather* fair on the whole, but rain falling at Christiansund, Cambridge, and Lorient, and showers on our extreme north and north-west coasts. Showers falling later in many parts of the Kingdom. *Temperature* fallen generally; readings ranging from 64° at Prawle Point to 48° at Stornoway. Maxima over England from 7° to 10° lower than on previous day. *Wind* moderate North-Westerly or Northerly over the greater part of our Islands and France, but South-Westerly in the north-east of France and North-Easterly in the north of Holland. North-Westerly winds subsequently becoming general. *Sea* moderate to smooth. *Barometer* rising in the extreme north and also over Spain and the south-west of France, but falling elsewhere. Pressure highest over Spain and lowest in the north of Scandinavia, but small depression lying over Holland. Rise taking place generally later, and and depression moving eastward.	
		**Friday, July 9.** *Weather* fair over the greater part of Western Europe, but rain falling at Hernösand, Sumburgh Head, and Biarritz, and passing showers at Valencia. Showers falling later in most districts, and thunder heard at Sittingbourne. *Temperature* fallen generally; readings ranging from 64° at Prawle Point to 48° in the Shetlands. Maxima at some of the English stations more than 20° lower than on Tuesday. *Wind* light or moderate from North-West or North generally. *Sea* rather rough at Sumburgh Head and Scilly, but slight or smooth elsewhere. *Barometer* rising at all but the Swedish stations. Pressure highest to the south-westward of our Islands, and lowest over the Gulf of Bothnia, with slight but irregular gradients for north-westerly winds. No important change later.	

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

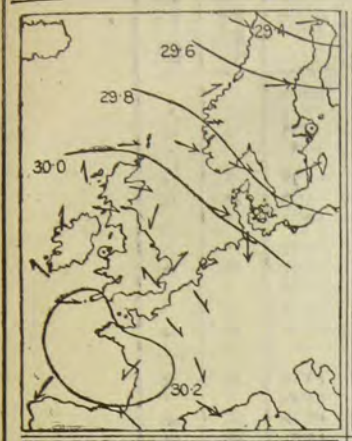
Weather

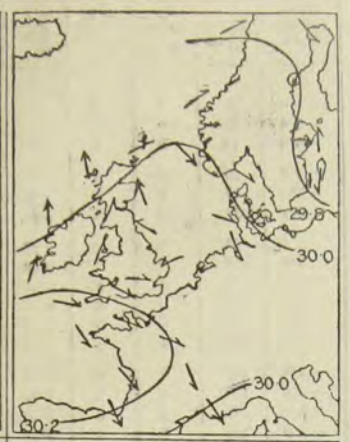
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, July 10.

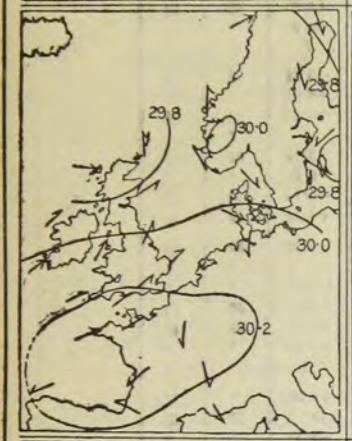
Weather fair in most places, but dull in the west of Ireland and showery at Yarmouth. Rain falling in Ireland and the west of Scotland later.

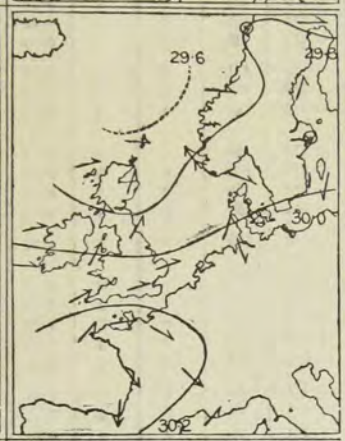
Temperature fallen a little at our extreme southern and many of the Continental stations, but risen elsewhere; readings over our Islands varying from 61° at Scilly and Prawle Point to 52° at Sumburgh Head and 51° at Yarmouth.

Wind Westerly or North-Westerly over Great Britain and the eastern shores of the North Sea, and North-Easterly in the west of France, but South-Easterly or Southerly in Ireland; light or moderate in force generally. Subsequently increasing to strong breeze from South in extreme west.

Sea rather rough at Valencia, moderate to smooth elsewhere.

Barometer rising at all but our extreme western stations. Anticyclone lying over the Bay of Biscay and the west of France, with low pressures in the north of Sweden. Depression subsequently skirting our western coasts, occasioning a fall of the barometer at all but the south-eastern stations.





Sunday, July 11.

Weather fine at our south-eastern and many of the Continental stations, but dull and rainy on most parts of our western and northern coasts.

Temperature risen generally; readings ranging from 65° at Parsonstown to 50° in the Shetlands.

Wind Northerly at the Swedish and many of the French stations, but South-Westerly or Southerly elsewhere; light or moderate in force in most places. Subsequently veering to West on our extreme western and northern coasts.

Sea rather rough at Valencia, but slight or smooth elsewhere.

Barometer falling in our Islands, but rising at the Continental stations. Anticyclone lying over France and the Bay of Biscay, and depression of previous day passing away to the northward of Scotland. Slight rise taking place in the west of Ireland later.

Monday, July 12.

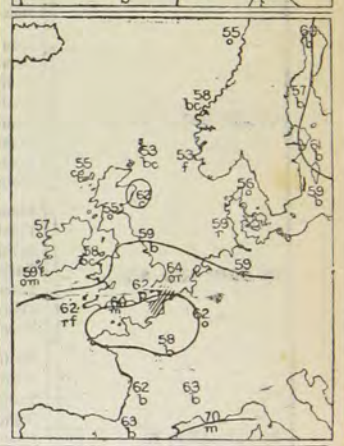
Weather fine in Sweden, France, the east of Scotland and the north of England, but cloudy elsewhere, with rain in the south and south-east of England, and fog in the south-west. Showers falling later at several of our northern stations.

Temperature risen a few degrees in the east, but fallen in the west, readings ranging from 66° at Loughborough to 53° in the Shetlands.

Wind South-Easterly or Southerly in Norway, and variable in the south of France, but light or moderate from South-West or West elsewhere.

Sea moderate to smooth.

Barometer falling in most places. Pressure highest in France, and lowest to the northward of our Islands, with some small and very shallow depressions over England. Depressions subsequently moving eastwards, and barometer rising slightly in west.



Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 109 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	57	41	54·4	44·6	49·2	− 4·0	50	0	6	0·43	−0·05	*	*
	Stornoway	60	38	57·6	45·3	51·0	− 3·4	63	0	5	0·55	−0·15	41	34
	Wick	65	33	60·3	44·9	52·1	− 3·0	71	0	6	0·52	+0·04	*	*
1. SCOTLAND, E.	Nairn	70	37	63·4	48·7	55·5	− 2·0	95	0	5	0·35	−0·17	*	*
	Aberdeen	71	40	65·6	47·3	55·8	− 1·4	97	0	4	0·26	−0·29	53	44
	Leith	70	44	66·7	50·0	57·8	− 0·7	111	0	3	0·30	−0·30	*	*
2. ENGLAND, N.E.	Alnwick Castle	68	44	62·3	48·7	55·0	− 2·6	91	0	4	0·23	−0·34	*	*
	Durham	75	43	69·2	49·7	58·8	0·0	118	0	1	0·02	−0·57	43	37
	Shields	74	44	64·4	50·0	56·7	− 1·7	103	0	1	0·05	−0·49	*	*
	Scarborough ℜ	73	46	65·8	51·7	58·3	− 1·1	114	0	2	0·14	−0·47	*	*
	York	73	42	68·6	51·6	59·5	− 1·4	123	0	3	0·14	−0·44	41	35
	Spurn Head	70	49	62·7	53·6	57·8	− 1·9	111	0	5	0·14	?	*	*
3. ENGLAND, E.	Hillington ℜ	82	45	69·4	48·4	58·2	− 2·2	113	0	5	1·11	+0·51	42	37
	Yarmouth	81	47	67·0	54·9	60·5	− 0·6	130	0	5	1·03	+0·45	*	*
	Geldeston	82	40	68·2	47·5	57·1	− 3·7	106	0	6	0·99	+0·49	37	32
	Cambridge	87	45	73·0	51·3	61·4	− 1·0	136	0	3	0·57	+0·05	43	38
	Rothamsted	83	43	70·9	49·9	59·7	− 2·5	124	0	2	0·49	−0·09	*	*
	Ingatestone	83	45	70·9	50·5	60·0	− 2·7	126	0	4	0·76	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	78	43	69·7	51·9	60·2	− 1·1	127	0	3	0·10	−0·52	32	28
	Loughborough	82	48	71·4	53·3	61·7	− 0·4	138	0	4	0·19	−0·34	*	*
	Leicester	82	46	70·9	52·7	61·2	− 1·0	134	0	4	1·02	+0·40	32	28
	Cheadle ℜ												*	*
	Churchstoke ℜ	76	43	68·0	49·7	58·2	− 1·5	113	0	2	0·14	−0·43	33	29
	Hereford ℜ	83	49	72·7	53·7	62·5	+ 1·1	144	0	4	0·31	−0·21	*	*
	Cirencester	80	45	70·0	50·9	59·8	− 0·9	125	0	3	0·51	−0·16	48	42
	Oxford	82	47	70·9	53·7	61·7	+ 0·4	138	0	3	0·72	+0·15	47	41
5. ENGLAND, S.	London†	85	47	72·4	51·6	61·3	− 1·8	135	0	2	0·38	−0·10	39	35
	Strathfield Turgiss ℜ												*	*
	Dungeness	72	49	67·6	53·9	60·3	− 1·4	128	0	3	0·60	+0·20	*	*
	Hastings (St. Leonard's)	73	50	66·5	54·8	60·2	− 0·5	127	0	4	0·88	+0·46	54	48
	Southampton	84	49	73·6	53·8	63·0	+ 1·6	147	0	2	0·64	+0·11	53	47
	Hurst Castle	75	46	71·4	53·6	61·9	+ 1·2	139	0	2	0·52	+0·04	*	*
	Stowell ℜ	77	44	68·8	52·0	59·8	− 0·5	125	0	2	0·48	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	62	38	58·7	49·3	53·7	− 3·1	82	0	5	1·43	+0·09	*	*
	Glasgow	64	45	61·6	50·1	55·5	− 2·1	95	0	4	0·48	−0·31	34	29
	Ardrossan	64	41	61·3	50·1	55·3	− 2·4	93	0	5	0·76	+0·11	*	*
	Douglas (Isle of Man)	65	40	62·8	49·2	55·5	− 1·7	95	0	2	0·33	−0·29	52	45
7. ENGLAND, N.W.	Newton Reigny (Penrith)	69	40	64·3	49·0	56·1	− 2·0	99	0	4	0·12	−0·53	48	41
	Barrow-in-Furness	64	49	61·0	52·1	56·5	− 2·5	102	0	4	0·97	+0·29	*	*
	Stonyhurst	66	41	63·1	49·4	55·8	− 3·1	97	0	3	0·91	−0·08	35	30
	Blackpool ℜ	68	50	63·1	54·2	58·3	− 1·4	114	0	2	0·53	−0·17	51	44
	Manchester	71	43	65·3	50·4	57·3	− 2·9	107	0	3	0·28	−0·59	*	*
	Liverpool Obsy (Bidston)	74	51	66·1	54·4	59·8	− 0·7	125	0	1	0·07	−0·58	*	*
	Llandudno ℜ													
	Holyhead	63	49	61·3	52·0	56·3	− 2·5	100	0	3	0·50	0·00	*	*
8. ENGLAND, S.W.	Llandovery	79	35	70·1	48·9	58·8	− 1·6	118	0	4	0·63	−0·20	*	*
	Pembroke	65	51	61·1	54·6	57·6	− 2·1	109	0	4	0·74	+0·23	49	43
	Arlington (N. Devon)	74	42	65·3	50·6	57·4	− 3·4	108	0	3	1·59	+0·55	*	*
	Cullompton ℜ	83	39	71·8	50·5	60·4	− 1·0	129	0	2	0·26	−0·36	43	38
	Falmouth	72	50	66·1	54·4	59·8	− 0·9	125	0	3	0·75	+0·06	58	52
	Plymouth	78	45	71·1	54·8	62·4	+ 0·7	143	0	2	0·60	+0·04	48	43
	Prawle Point	74	46	68·3	53·3	60·3	+ 0·8	128	0	2	1·54	?	*	*
9. IRELAND, N.	Malin Head	62	49	59·9	52·0	55·7	− 6·0	96	0	5	0·42	?	*	*
	Londonderry	67	44	63·5	50·2	56·4	− 1·9	101	0	5	0·15	−0·59	*	*
	Mullaghmore	64	50	61·9	54·3	57·8	− 1·6	111	0	5	0·40	−0·46	*	*
	Belmullet	63	50	60·3	53·6	56·7	− 0·7	103	0	7	0·47	?	*	*
	Markree Castle	69	43	62·3	49·3	55·4	− 4·2	94	0	4	0·25	−0·49	21	18
	Brookeborough	68	43	63·3	48·1	55·2	− 4·7	92	0	2	0·29	?	*	*
	Armagh	69	41	64·3	48·7	53·0	− 3·7	98	0	5	0·27	−0·41	24	21
	Donaghadee	70	43	64·6	50·4	57·0	− 1·1	105	0	4	0·42	−0·14	*	*
	Edgeworthstown	67	41	63·6	48·4	55·5	− 4·2	95	0	3	0·26	−0·56	*	*
10. IRELAND, S.	Dublin	72	49	67·2	54·5	60·4	+ 0·7	129	0	3	0·14	−0·36	36	31
	Parsonstown	70	45	65·4	50·1	57·2	− 2·0	106	0	4	0·40	−0·27	16	14
	Kilkenny	75	43	67·6	50·7	58·6	− 1·3	116	0	2	0·38	−0·15	*	*
	Waterford	74	45	67·6	51·8	59·2	− 1·3	120	0	4	0·16	−0·46	*	*
	Roche's Point	68	49	64·6	51·9	57·8	− 3·0	111	0	3	0·28	−0·44	*	*
	Valencia	67	47	65·0	51·9	58·0	− 0·7	112	0	6	1·21	+0·33	32	28
	Killarney	68	42	64·2	49·7	56·5	− 3·2	102	0	5	0·63	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	54	65·4	56·9	60·9	+ 0·6	132	0	5	0·67	+0·17	*	*
	Jersey (Noirmont)	76	50	67·4	54·7	60·6	− 0·7	130	0	1	0·19	−0·30	68	62

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 29.] *New Series.* WEEK ENDING MONDAY, 19TH JULY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 116.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	42	57·2	46·7	51·6	3 below.	67	0	699	−176	669	+159
	1. SCOTLAND, EAST	75	43	64·7	48·2	55·9	2 below.	97	0	1033	−155	734	+191
	2. ENGLAND, N.E.	77	44	66·0	51·2	58·1	1 below.	113	0	1045	−213	697	+215
	3. ENGLAND, EAST	80	41	69·4	50·4	59·3	3 below.	121	0	1305	−187	750	+243
	4. MIDLAND COUNTIES	79	42	68·1	51·5	59·2	2 below.	120	0	1344 *	−162	721	+217
	5. ENGLAND, SOUTH	79	45	69·2	53·7	60·9	1 below.	132	0	1451	−158	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	67	45	61·0	50·8	55·6	2 below.	95	0	987	−268	579	+181
	7. ENGLAND, N.W.	75	44	64·1	52·9	58·1	2 below.	113	0	1146 *	−182	612	+229
	8. ENGLAND, S.W.	77	44	66·2	54·3	59·8	1 below.	125	0	1365	−173	490	+257
	9. IRELAND, NORTH	69	43	62·0	50·9	56·1	3 below.	99	0	1134	−197	492	+142
	10. IRELAND, SOUTH	70	41	64·5	52·8	58·3	2 below.	114	0	1361	−174	401	+162
	— CHANNEL ISLANDS	77	51	66·7	56·4	61·2	0 (average)	134	0	1500	−144	202	+109

	DISTRICTS. (See p. 116.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	12	6 more.	142	+17	18·5	+ 0·6	36	30	826	+ 37	31	+ 2
	1. SCOTLAND, EAST	4	9	3 more.	110	+ 6	13·8	+ 0·8	50	42	860	− 28	33	0
	2. ENGLAND, N.E.	4	10	4 more.	109	+ 8	13·6	− 0·1	32	28	684	−133	26	− 5
	3. ENGLAND, EAST	5	8	3 more.	106	+ 3	11·7	− 2·3	48	42	885	−111	34	− 4
	4. MIDLAND COUNTIES	5	9	more.	107	+ 5	17·1	+ 2·3	38	34	754 *	−119	29	− 4
	5. ENGLAND, SOUTH	4	9	4 more.	99 *	+ 2	14·3	+ 0·2	51	46	915	− 13	35	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	14	4 more.	114	− 1	22·4 †	+ 2·3	37	32	750	− 97	29	− 3
	7. ENGLAND, N.W.	5	8	1 more.	111	+ 6	19·5 *	+ 2·5	34	30	751 *	−103	29	− 3
	8. ENGLAND, S.W.	4	12	5 more.	110	− 1	20·2	− 1·5	46	42	922	− 66	36	− 2
	9. IRELAND, NORTH	6	15	8 more.	119	− 8	19·8	+ 1·5	29	26	671	−137	26	− 5
	10. IRELAND, SOUTH	5	11	4 more.	114	− 6	21·1	+ 0·1	29	26	790	−115	30	− 4
	— CHANNEL ISLANDS	4	11	6 more.	125	+ 6	16·6	+ 0·2	55	51	1110	− 54	43	− 2

General Remarks.

Weather has been very changeable, with one or two heavy falls of rain, and frequent showers. Thunderstorms were experienced in the east and south of England on the evening or night of the 19th.

Temperature has been below the mean in all districts excepting the Channel Islands, the deficit varying between 1 and 3 degrees. The highest readings were observed in England and Ireland on the 18th, and in Scotland on the 19th, when the thermometer rose to 79° in the "Midland Counties" and "England, S.", and to 80° in "England, E." The lowest of the minimum readings occurred either on the early morning of the 15th or 16th, when the thermometer fell to 41° in "England, E." and "Ireland, S.", and to between 42° and 44° in all other districts excepting "Scotland, W." where it did not go below 45°.

Rainfall has been everywhere more than the mean, and in the northern parts of Scotland, Ireland, and the Channel Islands the excess has been considerable.

Bright sunshine has been less prevalent than it was last week. The percentages of the possible duration have ranged from 26 in Ireland and 30 in "Scotland, N." and "England, N.W.", to 46 in "England, S.", and 51 in the "Channel Islands".

Depressions observed.—During the greater part of the week pressure was high over Spain or France, while numerous depressions passed over or to the northward of our Islands. The prevailing winds were therefore Westerly. The only depression of importance which appeared was a rather deep system, the centre of which crossed Scotland on the night of the 13th and subsequently passed away in a Northerly direction. As this came on, South-Westerly gales were felt on our west and south coasts, while in its rear a North-Westerly gale was experienced in the extreme north of Scotland. Towards the close of the week the area of highest readings was transferred from southern to central Europe, the wind over our Islands backed to the southward, and a series of depressions began to skirt our extreme western coasts. On the evening of the 19th, a small shallow disturbance advanced with great rapidity from the south of France to our south-east coasts, and occasioned the thunderstorms referred to above.

* These values have been altered somewhat, owing to the receipt of some arrears of observation.
† This value has been altered slightly, owing to an error in a recent Return from Glasgow.

D 99084. 350.—7/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

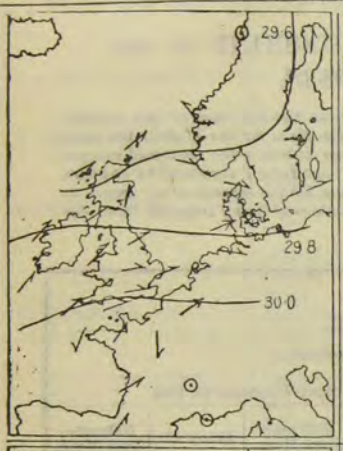
Weather

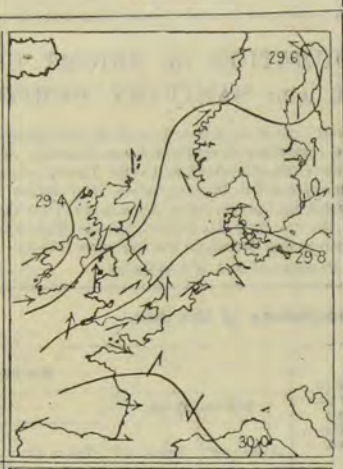
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, July 13.

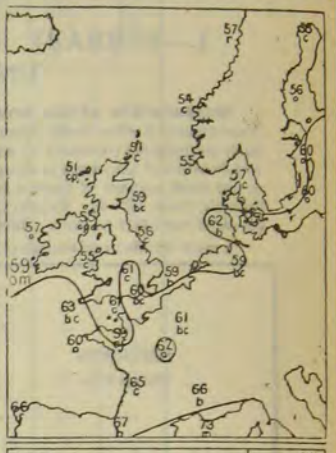
Weather fair in most places, but dull on our extreme western coasts and showery in the north-west. Rain falling later at all but our eastern stations—heavily in the west and north.

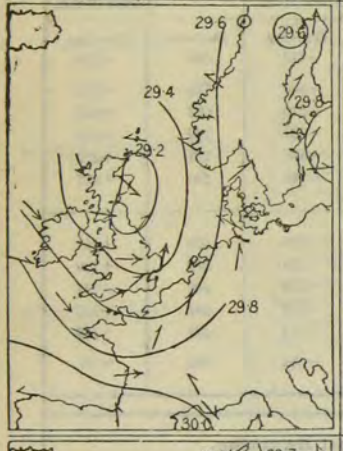
Temperature fallen a little generally; readings over our Islands ranging from 61° at several of the English stations to 51° in the Shetlands and Hebrides.

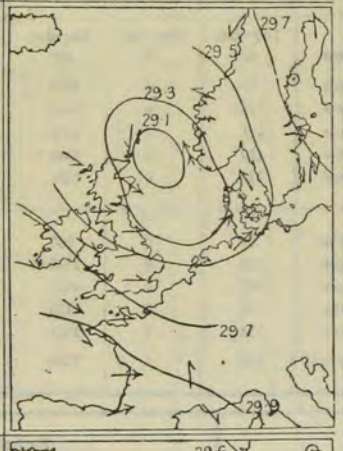
Wind Southerly in Sweden and the east of Scotland, but South-Westerly or Westerly elsewhere; light or moderate in force generally. Subsequently backing to South on our western coasts, and increasing to gale.

Sea moderate to smooth at first, but rising in west later.

Barometer falling a little in most places. Pressure highest in the south of France, with a large area of low readings to the northward of our Islands. Rather deep depression approaching Ireland later, and barometer falling quickly in west.







Wednesday, July 14.

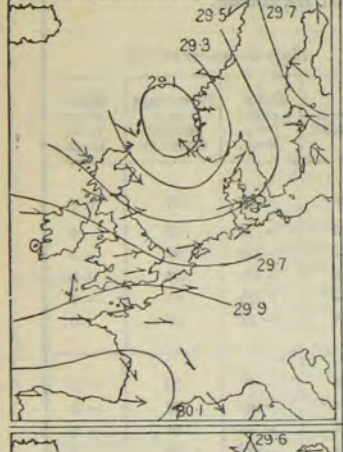
Weather cloudy or overcast generally, with steady rain in the north and east of Scotland, and passing showers in many other localities. Some improvement taking place generally later, but rain continuing in extreme north.

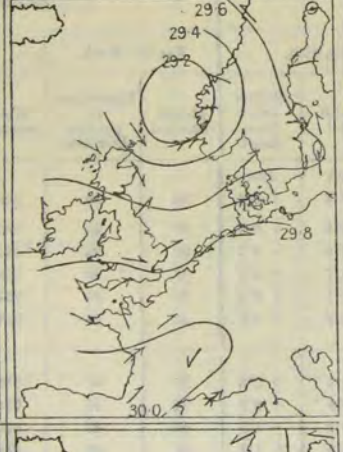
Temperature fallen a little; readings ranging from 65° in London to 51° at Nairn.

Wind strong to gale from West or North-West on our western coasts, but fresh South-Westerly in the east and South-Easterly on the eastern shores of the North Sea. Subsequently increasing to slight gale from North-West in the north of Scotland.

Sea rough at some of our north-western stations, and rather rough in the west and south generally.

Barometer rising in Sweden and the west of our Islands, but falling elsewhere. Pressure highest in Spain, with centre of a rather deep depression off the east of Scotland. Depression subsequently moving northwards, and barometer rising at all but our extreme northern stations.





Thursday, July 15.

Weather fair over the greater part of Western Europe, but showers falling locally.

Temperature risen a little at some of our western stations, but fallen elsewhere; readings over our Islands ranging from 62° at Dungeness to 49° at Wick.

Wind fresh to strong from West or North-West in the east, but light from South in the extreme south-west, and strong from South-East at the Norwegian stations.

Sea rather rough on exposed parts of our western and northern coasts.

Barometer rising at all but the Scandinavian stations and Valencia. Depression of previous day now lying off the west of Norway and continuing to move northwards. Shallow disturbances appearing off our west and south-west coasts later, occasioning slight fall of the barometer in many parts of Ireland and England.

Friday, July 16.

Weather fair at most stations, but showery in some parts of England. Heavy rain falling on our south-west coasts at night.

Temperature changed irregularly; readings ranging from 64° at Hurst Castle to 50° in the Shetlands.

Wind moderate to strong from West or North-West in our Islands and France, but South-Easterly or Southerly on the eastern shores of the North Sea.

Sea rather rough off the north of Scotland and the south-west of England, but moderate to smooth elsewhere.

Barometer rising generally. Pressure highest over the north of Spain, and depression of previous two days filling up to the northward of our Islands. Rise continuing all day.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

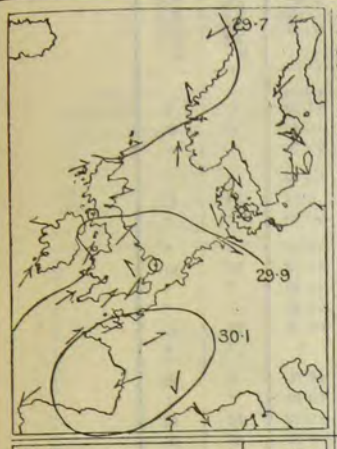
Weather

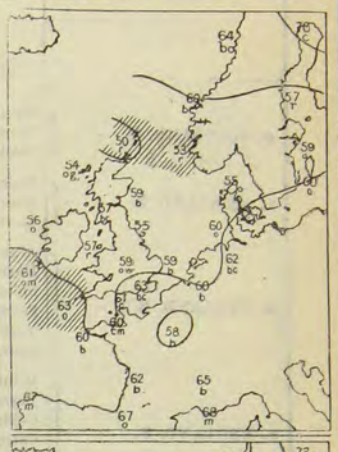
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, July 17.

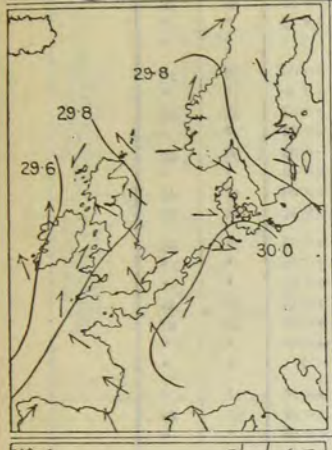
Weather fine at our northern, eastern, and many of the Continental stations, but dull and rainy on our western coasts. Rain extending to most parts of our Islands later.

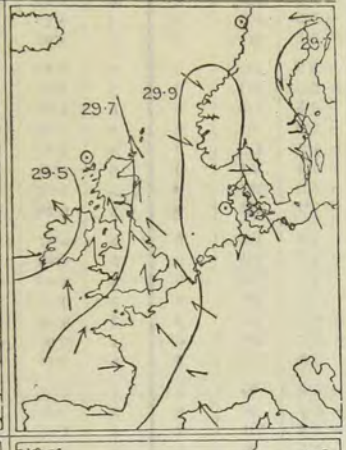
Temperature changed rather irregularly; readings ranging from 63° at Scilly, Cambridge, and in London, to 50° in the Shetlands.

Wind light from South-East or East in the north of Ireland and the north-west of England, but South-Westerly or Westerly in most other localities. Subsequently backing to South on our east coasts.

Sea rough in the south-west and also at Sumburgh Head, but moderate to smooth elsewhere.

Barometer rising on all but our western coasts. Pressure high over France and the Bay of Biscay, with a large area of low pressure to the northward of our Islands and some small shallow depressions over our western coasts. Small depressions subsequently moving eastwards.





Sunday, July 18.

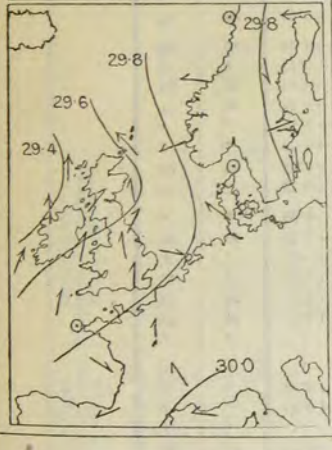
Weather fine at our eastern, southern, and most of the Continental stations, but dull and rainy on our western and northern coasts.

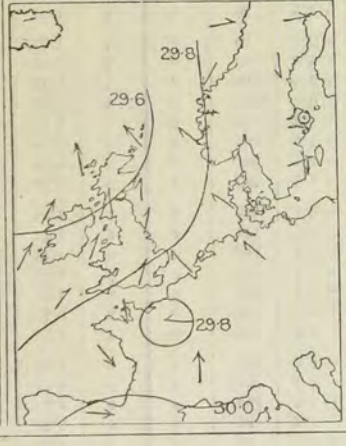
Temperature risen a little; readings ranging from 68° at Cambridge to 52° in the Shetlands. Subsequently rising to 75° at Liverpool, 76° at Oxford, 79° at Loughborough, Hurst Castle, and in London, and 80° at Cambridge.

Wind moderate North-Westerly on the eastern shores of the North Sea, but South-Easterly or Southerly elsewhere. Subsequently veering to South-West and West in the west of France.

Sea rough at Valencia but moderate to smooth elsewhere.

Barometer falling at all but the Scandinavian stations. Pressure highest over central Europe, with a large but shallow depression to the westward of our Islands.





Monday, July 19.

Weather fair generally, but showers falling at some of our western stations. Thunderstorms with heavy rain occurring in the south and east of England in evening or night.

Temperature fallen a little in the west, but risen elsewhere; readings ranging from 69° at Yarmouth to 52° in the Shetlands. Maxima over England lower than on previous day.

Wind Southerly or South-Westerly over the greater part of our Islands, but South-Easterly in the north of Scotland, and also on the eastern shores of the North Sea; strong in force on our western coasts.

Sea rough or rather so on many parts of our western and northern coasts.

Barometer fallen at all but our southern, and the Scandinavian stations. Pressure highest over central Europe, but relatively high over Norway and Denmark, with large depression to the westward of our Islands. Shallow disturbance subsequently advancing from south of France to our south-east coasts.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 113 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	56	45	53·7	46·9	50·1	− 3·5	57	0	5	2·00	+1·52	*	*
	Stornoway	64	42	58·9	46·7	52·4	− 2·1	73	0	3	0·29	−0·40	36	30
	Wick	69	42	58·9	46·4	52·2	− 3·0	71	0	4	1·28	+0·78	*	*
1. SCOTLAND, E.	Nairn	75	45	63·9	48·1	55·5	− 2·2	95	0	4	0·97	+0·39	*	*
	Aberdeen	70	43	64·0	47·0	54·9	− 2·3	90	0	4	0·60	0·00	50	42
	Leith	73	46	66·3	49·6	57·4	− 1·1	108	0	4	1·03	+0·39	*	*
2. ENGLAND, N.E.	Alnwick Castle	71	44	64·6	50·6	57·1	− 0·5	106	0	4	0·64	−0·01	*	*
	Durham	75	44	67·7	50·2	58·3	− 0·4	114	0	3	1·35	+0·72	36	31
	Shields	71	46	65·1	50·7	57·4	− 1·2	108	0	4	1·38	+0·79	*	*
	Scarborough ℔	77	48	66·5	53·3	59·4	− 0·2	122	0	4	0·83	+0·22	*	*
	York	75	45	66·7	49·7	57·6	− 3·8	109	0	4	1·09	+0·51	28	25
	Spurn Head	75	50	65·4	52·6	58·6	− 1·6	116	0	4	0·85	?	*	*
3. ENGLAND, E.	Hillington ℔	78	41	69·9	49·0	58·7	− 2·1	117	0	4	1·25	+0·63	48	42
	Yarmouth	77	48	67·9	52·6	59·7	− 1·7	124	0	5	0·94	+0·33	*	*
	Geldeston	78	46	70·2	51·9	60·4	− 0·9	129	0	5	0·78	+0·23	52	46
	Cambridge	80	42	70·6	50·1	59·6	− 3·1	123	0	5	0·91	+0·39	43	38
	Rothamsted	76	41	68·6	48·1	57·6	− 4·8	109	0	4	0·73	+0·13	*	*
	Ingatestone	76	46	69·3	50·9	59·5	− 3·5	123	0	5	0·37	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	79	45	69·0	50·4	59·1	− 2·3	120	0	5	0·65	+0·03	30	27
	Loughborough	79	45	68·7	51·7	59·6	− 2·6	123	0	5	1·01	+0·49	*	*
	Leicester	77	46	69·4	51·5	59·8	− 2·5	125	0	6	1·49	+0·88	35	31
	Cheadle ℔	74	46	64·1	50·5	56·8	− 3·6	104	0	5	1·05	+0·35	*	*
	Churchstoke ℔	74	48	66·2	51·6	58·4	− 1·8	115	0	4	0·56	−0·02	35	31
	Hereford ℔	77	46	70·3	52·5	60·8	− 0·8	132	0	5	0·61	+0·09	*	*
	Cirencester	76	42	68·4	50·4	58·8	− 2·2	118	0	5	1·27	+0·58	47	42
	Oxford	76	49	68·7	53·3	60·5	− 1·0	130	0	3	0·70	+0·12	44	39
5. ENGLAND, S.	London†	79	50	70·9	53·3	61·5	− 1·8	137	0	5	0·87	+0·38	39	35
	Strathfield Turgiss ℔	79	48	71·8	52·2	61·1	− 0·3	134	0	5	0·80	+0·28	*	*
	Dungeness	71	51	67·0	55·7	61·0	− 0·7	133	0	3	1·10	+0·68	*	*
	Hastings (St. Leonard's)	73	50	66·4	53·5	59·5	− 1·7	123	0	3	0·87	+0·43	54	49
	Southampton	77	51	70·4	54·3	61·8	+ 0·2	139	0	3	0·83	+0·26	59	53
	Hurst Castle	79	53	71·3	55·6	62·9	+ 1·7	146	0	4	0·97	+0·49	*	*
	Stowell ℔	75	45	66·7	51·0	58·3	− 2·2	114	0	5	0·71	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	66	48	59·9	50·3	54·8	− 2·0	90	0	7	2·11	+0·77	*	*
	Glasgow	67	46	62·0	51·2	56·2	− 1·7	99	0	3	1·10	+0·29	35	30
	Ardrossan	65	49	61·0	52·3	56·4	− 1·3	101	0	4	1·05	+0·40	*	*
	Douglas (Isle of Man)	65	45	61·1	49·5	54·9	− 2·5	90	0	3	1·21	+0·56	39	34
7. ENGLAND, N.W.	Newton Reigny (Penrith)	73	44	63·7	49·7	56·2	− 2·2	99	0	4	1·27	+0·59	35	30
	Barrow-in-Furness	71	47	62·3	53·4	57·5	− 1·9	109	0	5	1·05	+0·37	*	*
	Stonyhurst	72	47	63·6	51·7	57·2	− 2·0	106	0	4	1·11	+0·09	33	29
	Blackpool ℔	74	49	64·6	54·4	59·1	− 0·9	120	0	4	0·77	+0·07	35	31
	Manchester	74	46	65·2	52·0	58·1	− 2·3	113	0	5	0·78	−0·10	*	*
	Liverpool Obsy (Bidston)	75	52	65·6	54·6	59·7	− 1·0	124	0	4	0·76	+0·08	*	*
	Llandudno ℔	74	52	65·2	51·1	59·3	− 1·4	121	0	5	0·38	−0·23	34	30
	Holyhead	70	51	62·4	53·4	57·6	− 1·6	109	0	5	0·39	−0·12	*	*
8. ENGLAND, S.W.	Llandovery	77	44	68·9	52·1	59·8	− 0·7	125	0	7	2·06	+1·20	*	*
	Pembroke	62	53	60·4	55·0	57·5	− 2·5	109	0	5	1·77	+1·25	40	36
	Arlington (N. Devon)	72	48	65·6	52·9	58·8	− 2·1	118	0	5	1·34	+0·26	*	*
	Cullompton ℔	73	47	69·8	53·2	60·9	− 0·7	132	0	3	0·67	+0·05	52	47
	Falmouth	68	52	66·1	54·9	60·1	− 1·1	127	0	4	1·23	+0·53	48	44
	Plymouth	72	53	69·0	56·8	62·5	+ 0·8	144	0	2	0·75	+0·16	44	40
	Prawle Point	65	52	63·6	54·9	59·0	− 0·9	119	0	4	0·52	?	*	*
9. IRELAND, N.	Malin Head	65	48	60·0	50·6	55·0	− 1·7	91	0	6	1·66	?	*	*
	Londonderry	69	43	63·7	50·3	56·5	− 2·0	102	0	6	1·28	+0·52	*	*
	Mullaghmore	65	48	61·6	53·4	57·2	− 2·4	106	0	6	1·32	+0·43	*	*
	Belmullet	64	47	60·3	52·1	55·9	− 1·8	97	0	6	2·20	?	*	*
	Markree Castle	64	47	61·1	49·7	55·0	− 4·8	91	0	6	1·60	+0·86	28	25
	Brookeborough	67	46	62·5	50·7	56·2	− 3·8	99	0	5	1·40	?	*	*
	Armagh	67	45	63·6	50·3	56·4	− 3·6	101	0	6	1·19	+0·48	30	26
	Donaghadee	65	47	62·4	51·0	56·3	− 1·9	100	0	5	1·04	+0·44	*	*
	Edgeworthstown	66	46	62·9	50·3	56·2	− 3·7	99	0	5	1·94	+1·12	*	*
10. IRELAND, S.	Dublin	70	50	66·0	54·7	60·0	+ 0·1	126	0	5	0·55	+0·02	36	32
	Parsonstown	67	49	64·6	52·1	57·9	− 1·4	111	0	5	0·78	+0·10	32	28
	Kilkenny	66	45	65·9	52·4	58·7	− 1·4	117	0	7	1·38	+0·85	*	*
	Waterford	69	47	65·3	52·3	58·4	− 2·3	115	0	5	0·76	+0·13	*	*
	Roche's Point	65	48	62·9	52·9	57·6	− 3·2	109	0	5	1·20	+0·49	*	*
	Valencia	65	47	63·1	53·4	57·9	− 1·1	111	0	5	1·64	+0·75	19	17
	Killarney	68	41	64·0	51·8	57·5	− 2·1	109	0	5	1·08	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	71	55	66·7	57·1	61·6	+ 0·9	137	0	3	0·85	+0·34	*	*
	Jersey (Noirmont)	77	51	66·7	55·6	60·8	− 0·9	132	0	4	1·32	+0·82	55	51

Stations marked ℔ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 30.] *New Series.* WEEK ENDING MONDAY, 26TH JULY, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 120.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	75	47	60·3	51·0	55·3	1 above.	93	0	792	−165	669	+159
	1. SCOTLAND, EAST	76	48	65·0	52·8	58·5	1 above.	116	0	1149	−140	734	+191
	2. ENGLAND, N.E.	75	46	66·5	53·9	59·7	1 above.	124	0	1169	−197	697	+215
	3. ENGLAND, EAST	84	48	70·7	54·9	62·2	0 (average).	141	0	1446	−167	750	+243
	4. MIDLAND COUNTIES	81	48	69·3	53·8	61·0	0 (average).	133	0	1477	−150	721	+217
	5. ENGLAND, SOUTH	84	47	68·2	56·2	61·8	0 (average).	139	0	1590	−150	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	74	49	64·7	53·6	58·8	1 above.	118	0	1105	−258	579	+181
	7. ENGLAND, N.W.	75	46	65·0	53·8	59·0	1 below.	119	0	1265	−177	612	+229
	8. ENGLAND, S.W.	75	46	64·5	54·7	59·3	2 below.	120	0	1485	−177	490	+257
	9. IRELAND, NORTH	69	46	63·1	52·1	57·2	2 below.	106	0	1240	−196	492	+142
	10. IRELAND, SOUTH	69	43	64·3	52·5	58·0	2 below.	112	0	1473	−180	401	+162
	— CHANNEL ISLANDS	75	54	66·0	56·6	61·0	0 (average).	133	0	1633	−140	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 120.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	5	0 (average).	147	+19	19·0	+ 0·6	34	29	860	+ 37	31	+ 2
	1. SCOTLAND, EAST	6	9	3 more.	116	+ 9	14·7	+ 1·0	35	30	895	− 32	32	− 1
	2. ENGLAND, N.E.	5	23	17 more.	114	+ 9	15·9	+ 1·6	35	31	719	−133	26	− 5
	3. ENGLAND, EAST	4	15	9 more.	110	+ 3	13·2	− 1·3	49	44	934	−106	34	− 4
	4. MIDLAND COUNTIES	5	12	6 more.	112	+ 6	18·3	+ 2·8	34	31	788	−121	29	− 4
	5. ENGLAND, SOUTH	5	11	6 more.	104	+ 4	15·4	+ 0·8	42	39	957	− 15	35	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	9	0 (average).	119	+ 1	23·3	+ 2·4	30	27	780	−105	28	− 4
	7. ENGLAND, N.W.	5	25	18 more.	116	+ 7	22·0	+ 4·3	30	27	781	−110	29	− 3
	8. ENGLAND, S.W.	6	16	8 more.	116	+ 1	21·8	− 1·7	34	31	956	− 83	35	− 3
	9. IRELAND, NORTH	6	10	2 more.	125	− 6	20·8	+ 1·7	18	16	689	−150	25	− 5
	10. IRELAND, SOUTH	6	14	8 more.	120	− 3	22·5	+ 0·9	33	30	823	−120	30	− 5
	— CHANNEL ISLANDS	7	15	10 more.	132	+ 9	18·1	+ 1·2	39	36	1149	− 74	43	− 2

General Remarks.

Weather has been in an unsettled, changeable condition, with frequent falls of rain and occasional thunder and lightning. Towards the end of the period the rainfall was very heavy over England and the north of Ireland, and thunderstorms very general.

Temperature has been 1° or 2° below the mean in Ireland and the western parts of England, but 1° above or equal to the normal value elsewhere. The highest of the maxima, which were generally recorded on the 21st, ranged from 69° in Ireland to 74° in "Scotland, W.", and to between 81° and 84° over eastern, central, and southern England. The lowest of the minima, which were registered on different dates in the various districts, ranged from 43° in "Ireland, S." to 49° in "Scotland, W.", and to 54° in the "Channel Islands".

Rainfall has been equal to the mean in the north and west of Scotland, but more in all other parts of the Kingdom. In most districts the excess was large; in "England, N.E." the fall exceeded the mean by 1·7 ins., and in "England, N.W." by 1·8 ins.

Bright sunshine shows a further decrease in most districts, the percentages of the possible amount of duration varied from 16 in "Ireland, N." to 27 in "Scotland, W." and "England, N.W.", and to 44 in "England, E."

Depressions observed.—During the whole of this period large and rather deep depressions skirted our extreme west and north-west coasts, while some smaller but well defined disturbances appeared over our Islands and the North Sea. Of the latter class the first was moving northwards over the North Sea and dispersing as the period commenced. The second passed from the westward over our more southern counties on the 23rd and subsequently moved northwards to Scandinavia, while a third travelled eastwards across Ireland and the north of England during the night of the 25th—26th. The general current of wind was Southerly to South-Westerly, and moderate to fresh in force, but at our western stations it blew strongly at times, attaining the force of a gale between the 20th and 22nd. At the end of the week, Northerly and North-Easterly breezes had appeared in all the more northern and western parts of the Kingdom and in some places blew freshly or strongly.

E 23076. 350.—7/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Tuesday, July 20.

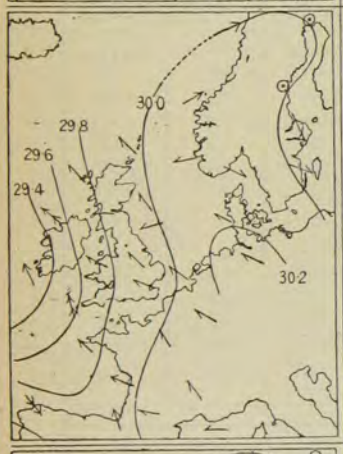
Weather rainy in the south of Ireland and also in the south of Norway, but fair or fine elsewhere. Rain falling later at all our western stations, and solar halos seen in the south-east of England.

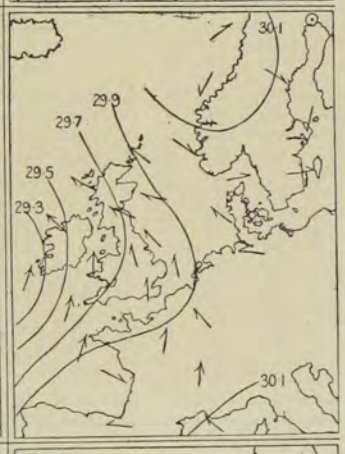
Temperature fallen a little in the north and east; readings ranging from 63° at Liverpool, Scilly, and in London to 55° at Sumburgh Head and Malin Head. Subsequently rising to 75° at Loughborough, Liverpool, and in London, and 76° at Cambridge.

Wind Northerly in Sweden and South-Westerly over the eastern parts of Great Britain, but South-Easterly or Southerly elsewhere; moderate in force generally, but strong in the west of Ireland.

Sea rough at Valencia and rather rough at Scilly, but moderate to smooth elsewhere.

Barometer falling a little on the eastern shores of the North Sea and also at Valencia, but rising in most other localities. Anticyclone lying over France, with small depression over the North Sea, and larger disturbance approaching Ireland. Fall taking place later at all our western stations.





Wednesday, July 21.

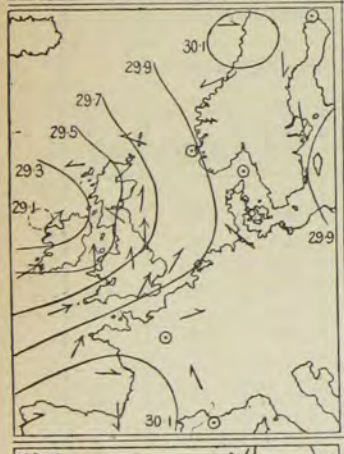
Weather dull and rainy on our south-west coasts, but fine in nearly all other parts of Western Europe. Rain falling later over nearly the whole of the United Kingdom.

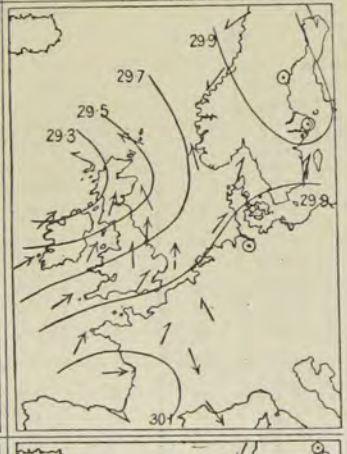
Temperature fallen a few degrees on the eastern shores of the North Sea, but risen elsewhere; readings over our Islands ranging from 71° in London and at Cambridge to 55° in the Shetlands. Subsequently rising to 81° at Loughborough and 84° in London and at Cambridge.

Wind South-Easterly or Southerly; moderate in force in the north and east, but strong to a gale in the west. Subsequently veering to South-West on our extreme south-west coasts.

Sea high at Valencia and Scilly, and rough or rather so on our west coasts generally.

Barometer falling at all but our extreme northern and the Scandinavian stations. Long band of high pressure extending from Central Europe over Denmark and Norway, with a large and deep depression to the westward of Ireland. Slight rise taking place in south-west later.





Thursday, July 22.

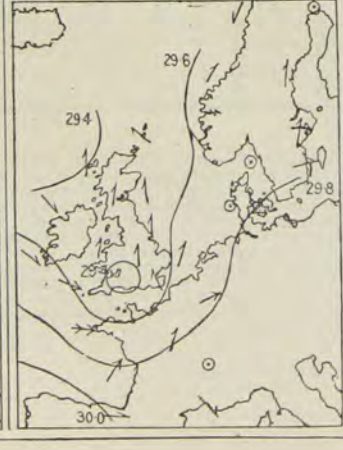
Weather showery at some of our western and northern stations, but fine elsewhere. Showers falling later in most parts of the Kingdom.

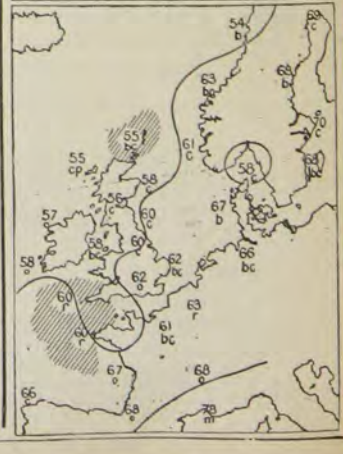
Temperature risen a little in the east and south-west, but fallen elsewhere; readings ranging from 66° in London and at Cambridge to 53° in the Shetlands. Maxima over England from 10° to 15° lower than on previous day.

Wind moderate from East or South-East in Norway and the north of Scotland, and variable in the south of France, but fresh or strong from South-West or South elsewhere.

Sea high at Pembroke, and rough or rather so on our west and south-west coasts generally.

Barometer rising at our south-western, southern, and the French stations, but falling elsewhere. Pressure high in Spain and the south-west of France, and also in the north of Norway, with centre of deep depression off the north-west of Ireland. Depression subsequently moving northwards.





Friday, July 23.

Weather fine at many of our northern and eastern stations, but cloudy or overcast elsewhere, with rain and fog on our south-west coasts. Rain becoming general later.

Temperature fallen a little in most places; readings ranging from 64° at Cambridge to 55° at Sumburgh Head, Stornoway, and Malin Head.

Wind moderate South-Easterly in Norway and the north of Scotland, but fresh or strong from South or South-West in most other localities. Subsequently veering to West or North-West in Ireland and the south-west of England.

Sea rough in the western part of the Channel and rather rough at Sumburgh Head, but moderate to smooth elsewhere.

Barometer falling at all but our north-western stations. Pressure highest in France and relatively high in Sweden, with a depression off the north-west of Scotland, and a small subsidiary disturbance off the south of Ireland. Latter disturbance subsequently moving eastward over England.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

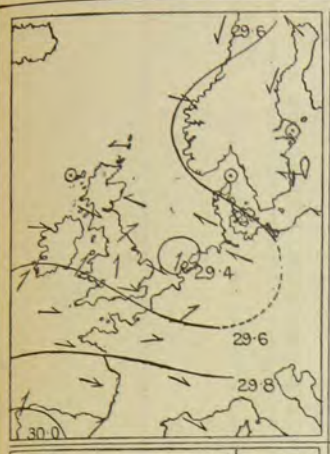
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Saturday, July 24.

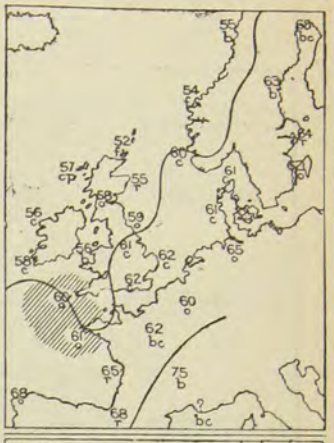
Weather rainy in the eastern parts of Great Britain, but fair or fine elsewhere. Showers falling later in many parts of the Kingdom.

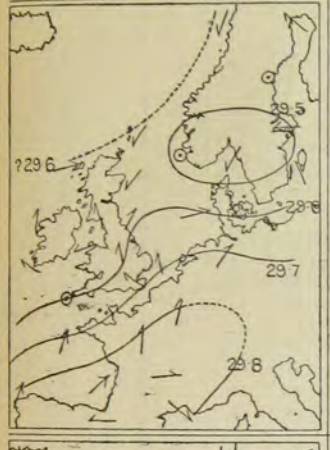
Temperature risen a little in the extreme south of England, but fallen in most other localities; readings ranging from 63° at Cambridge to 52° in the Shetlands.

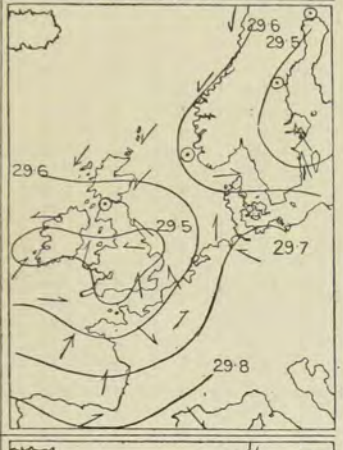
Wind Easterly or South-Easterly in Denmark, the south of Norway, and the north of Scotland, but South-Westerly or Westerly elsewhere; light or moderate in force generally. Subsequently veering to South in north of Scotland.

Sea rather rough at Scilly, Cape Grisnez, and Lorient, but moderate to smooth elsewhere.

Barometer falling at our eastern and many of the Continental stations, but rising elsewhere. Pressure highest in Spain with a long trough of low readings extending from the Netherlands to our extreme north-west coasts. Fall taking place at our western stations later.







Sunday, July 25.

Weather cloudy and unsettled, with rain in many parts of Great Britain and passing showers at Valencia. Thunderstorms and heavy rain occurring later over nearly the whole Kingdom.

Temperature changed rather irregularly; readings ranging from 62° at Dungeness, Yarmouth, and Jersey to 51° at Sumburgh Head.

Wind moderate South-Westerly at our southern and the French stations, but light South-Easterly on our north-west coast and Easterly in the North. Subsequently shifting to North-East in the north and north-west.

Sea moderate to smooth.

Barometer rising a little on our north and east coasts, but falling elsewhere. Trough of low pressure lying over the greater part of western Europe, with a large shallow depression over the south of Scandinavia and another off the west of Ireland. Other disturbances forming over England later, and barometer falling generally.

Monday, July 26.

Weather fine at some of our southern stations, but cloudy or overcast elsewhere, with steady rain over the north of England, and passing showers on our south-west coasts. Steady rain continuing over the north of England all day, and showers falling in most other localities.

Temperature fallen generally, readings ranging from 62° at Yarmouth to 51° at Sumburgh Head, Stornoway, and Nairn.

Wind moderate to strong from North-East on our western and northern coasts, but Westerly or South-Westerly at our southern and the French stations.

Sea rather rough at Sumburgh Head, but moderate to smooth elsewhere.

Barometer falling at most of the English stations, but rising elsewhere. Large trough of low pressure still lying over the greater part of western Europe with a well marked depression off the east of England. Depression subsequently moving away north-eastward, and barometer rising over England.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟹ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 117 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	59	47	56·3	49·3	52·6	− 1·1	74	0	4	0·21	−0·28	*	*
	Stornoway	75	48	63·0	51·9	57·1	+ 2·5	106	0	7	1·12	+0·53	34	29
	Wick	68	50	61·7	51·6	56·3	+ 1·1	100	0	4	0·28	−0·24	*	*
1. SCOTLAND, E.	Nairn	76	48	66·3	52·3	58·8	+ 1·1	118	0	6	0·81	+0·21	*	*
	Aberdeen	72	50	62·1	52·1	56·8	− 0·5	104	0	6	1·07	+0·42	35	30
	Leith	75	52	66·7	54·1	60·0	+ 1·5	126	0	5	0·89	+0·26	*	*
2. ENGLAND, N.E.	Alnwick Castle	71	46	64·3	51·9	57·7	+ 0·3	110	0	5	2·08	+1·41	*	*
	Durham	75	49	68·9	52·4	60·1	+ 2·4	127	0	5	3·13	+2·50	42	37
	Shields	71	49	64·9	53·6	59·3	+ 0·8	118	0	5	1·94	+1·34	*	*
	Scarborough ℳ	72	51	66·6	54·8	60·3	+ 1·7	128	0	5	2·41	+1·80	*	*
	York	75	48	67·7	54·1	60·4	− 1·0	129	0	5	3·20	+2·62	27	24
	Spurn Head	72	53	66·4	56·3	61·0	+ 0·9	133	0	5	0·85	?	*	*
3. ENGLAND, E.	Hillington ℳ	82	48	71·7	54·6	62·6	+ 1·9	144	0	4	1·72	+1·20	49	44
	Yarmouth	70	54	67·9	57·3	62·2	+ 0·8	141	0	5	1·62	+1·02	*	*
	Geldeston	77	52	70·1	55·9	62·5	+ 1·2	144	0	4	1·44	+0·89	50	45
	Cambridge	84	49	73·4	53·7	62·9	+ 0·2	146	0	3	1·79	+1·26	48	44
	Rothamsted	81	51	70·3	53·8	61·5	− 0·9	137	0	5	1·04	+0·44	*	*
	Ingatestone	84	50	70·5	54·0	61·7	− 1·3	138	0	5	1·37	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	80	49	69·7	54·0	61·3	− 0·1	135	0	6	1·18	+0·56	29	26
	Loughborough	81	52	71·7	55·0	62·8	+ 0·7	146	0	4	1·11	+0·58	*	*
	Leicester	81	53	71·8	55·4	63·0	+ 0·8	147	0	5	1·01	+0·49	29	26
	Cheadle ℳ	75	51	65·8	52·5	58·7	− 1·6	117	0	5	1·56	+0·86	*	*
	Churchstoke ℳ	72	48	66·5	52·1	58·8	− 1·5	118	0	6	0·86	+0·28	33	30
	Hereford ℳ	75	49	70·6	53·6	61·5	− 0·1	137	0	6	0·54	+0·01	*	*
	Cirencester	76	48	68·0	52·6	59·8	− 1·3	125	0	5	1·06	+0·36	38	35
	Oxford	79	52	70·3	55·4	62·3	+ 0·7	142	0	5	1·95	+1·38	41	37
5. ENGLAND, S.	London†	84	53	71·9	56·3	63·6	+ 0·3	151	0	3	1·19	+0·69	41	38
	Strathfield Turgiss ℳ	81	50	71·5	54·5	62·4	+ 1·0	143	0	5	0·75	+0·23	*	*
	Dungeness	73	51	66·6	57·4	61·7	0·0	138	0	4	1·10	+0·68	*	*
	Hastings (St. Leonard's)	75	53	66·6	56·6	61·3	− 0·1	135	0	4	0·66	+0·20	46	42
	Southampton	79	51	69·5	56·4	62·5	+ 0·9	144	0	5	0·97	+0·40	40	37
	Hurst Castle	79	54	67·6	57·6	62·3	+ 1·0	142	0	5	1·37	+0·88	*	*
	Stowell ℳ	74	47	64·0	54·3	58·8	− 1·8	118	0	6	1·39	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	74	52	65·4	53·9	59·3	+ 2·4	121	0	5	1·46	+0·15	*	*
	Glasgow	72	50	67·1	53·8	60·0	+ 2·2	126	0	5	0·38	−0·45	29	25
	Ardrossan	71	49	64·6	53·9	58·9	+ 1·2	118	0	4	0·51	−0·16	*	*
	Douglas (Isle of Man)	65	49	61·8	52·6	56·9	− 0·6	104	0	4	1·26	+0·58	31	28
7. ENGLAND, N.W.	Newton Reigny (Penrith)	72	46	65·4	50·7	57·6	− 0·8	109	0	5	3·60	+2·91	37	33
	Barrow-in-Furness	70	54	64·0	55·0	59·2	− 0·4	120	0	6	3·27	+2·58	*	*
	Stonyhurst	73	50	64·8	53·2	58·6	− 0·5	116	0	5	2·29	+1·27	29	26
	Blackpool ℳ	73	50	65·0	54·5	59·4	− 0·7	122	0	5	3·31	+2·61	27	24
	Manchester	75	50	67·5	53·3	59·9	− 0·5	125	0	5	1·89	+1·02	*	*
	Liverpool Obsy (Bidston)	75	52	65·6	54·6	59·7	− 1·0	124	0	5	2·35	+1·68	*	*
	Llandudno ℳ	74	53	65·0	54·9	59·6	− 1·1	123	0	5	1·21	+0·60	28	25
	Holyhead	69	52	62·9	54·1	58·1	− 1·3	113	0	6	2·07	+1·54	*	*
8. ENGLAND, S.W.	Llandovery	75	47	67·1	52·7	59·4	− 1·1	122	0	5	1·92	+1·03	*	*
	Pembroke	64	55	60·9	55·9	58·2	− 1·8	113	0	6	1·21	+0·68	35	32
	Arlington (N. Devon)	70	48	63·4	53·4	58·1	− 2·8	113	0	7	1·11	−0·04	*	*
	Cullompton ℳ	70	46	66·7	54·1	60·0	− 1·5	126	0	6	1·94	+1·32	28	26
	Falmouth	67	52	65·2	55·0	59·8	− 1·5	125	0	7	2·21	+1·49	39	36
	Plymouth	70	47	66·3	56·8	61·2	− 0·5	134	0	6	1·85	+1·24	34	31
	Prawle Point	64	52	62·0	54·7	58·1	− 1·8	113	0	6	0·94	?	*	*
9. IRELAND, N.	Malin Head	67	48	61·4	52·0	56·4	− 0·5	101	0	5	0·50	?	*	*
	Londonderry	69	49	65·5	51·5	58·0	− 0·5	112	0	7	0·63	−0·14	*	*
	Mullaghmore	68	55	62·6	55·6	58·9	− 0·8	118	0	7	0·68	−0·19	*	*
	Belmullet	68	53	61·7	54·4	57·8	+ 0·1	111	0	7	1·14	?	*	*
	Markree Castle	67	48	63·8	50·7	56·8	− 3·0	104	0	7	0·95	+0·20	17	15
	Brookeborough	68	46	64·2	50·1	56·7	− 3·3	103	0	4	0·80	?	*	*
	Armagh	68	50	63·7	52·5	57·7	− 2·2	110	0	6	0·61	−0·09	19	17
	Donaghadee	65	46	62·4	51·0	56·3	− 2·0	100	0	4	1·49	+0·89	*	*
	Edgeworthstown	68	47	63·0	50·7	56·4	− 3·5	101	0	6	2·07	+1·26	*	*
10. IRELAND, S.	Dublin	68	53	65·4	55·2	59·9	0·0	125	0	6	0·44	−0·13	31	28
	Parsonstown	69	47	65·3	52·0	58·2	− 1·1	113	0	6	0·88	+0·18	35	32
	Kilkenny	68	43	65·0	50·1	57·0	− 3·1	105	0	5	1·26	+0·71	*	*
	Waterford	66	49	64·0	53·1	58·2	− 2·6	113	0	5	1·47	+0·82	*	*
	Roche's Point	66	49	63·1	52·9	57·6	− 3·2	109	0	?6	?0·79	+0·08	*	*
	Valencia	65	51	63·4	53·3	58·0	− 1·2	112	0	6	2·40	+1·50	32	29
	Killarney	66	44	63·9	51·0	57·0	− 2·6	105	0	5	2·52	?	*	*
	Foynes	69	49	64·3	52·1	57·8	− 1·8	111	0	6	1·78	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	67	54	65·0	56·0	60·2	− 0·5	127	0	7	1·55	+1·03	*	*
	Jersey (Noirmont)	75	54	67·0	57·1	61·7	− 0·1	138	0	6	1·50	+1·00	39	36

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

Note.—It will be observed that the Reports from Foynes have recommenced.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 31.] *New Series.* WEEK ENDING MONDAY, 2ND AUGUST, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1863-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 124.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	30	54·1	44·3	48·9	6 below.	48	0	840	−203	669	+159
	1. SCOTLAND, EAST	68	44	60·1	46·7	52·9	5 below.	76	0	1225	−173	734	+191
	2. ENGLAND, N.E.	67	41	60·8	48·5	54·2	5 below.	85	0	1254	−232	697	+215
	3. ENGLAND, EAST	71	42	64·5	50·3	56·9	5 below.	104	0	1550	−197	750	+243
	4. MIDLAND COUNTIES*	70	38	63·7	50·4	56·7	5 below.	103	0	1580	−177	721	+217
	5. ENGLAND, SOUTH	74	44	66·0	53·0	59·1	3 below.	120	0	1710	−169	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	63	41	59·1	48·5	53·4	4 below.	80	0	1185	−291	579	+181
	7. ENGLAND, N.W.	65	41	59·8	50·2	54·7	5 below.	89	0	1354	−209	612	+229
	8. ENGLAND, S.W.	69	39	63·6	51·9	57·4	3 below.	108	0	1593	−198	490	+257
	9. IRELAND, NORTH	67	40	60·7	48·2	54·0	5 below.	84	0	1324	−227	492	+142
	10. IRELAND, SOUTH	70	43	62·7	50·1	55·9	4 below.	97	0	1570	−207	401	+162
	— CHANNEL ISLANDS	67	51	63·2	55·3	59·0	2 below.	119	0	1752	−156	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 124.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	9	3 more.	153	+21	19·9	+ 0·8	22	19	882	+ 37	31	+ 2
	1. SCOTLAND, EAST	4	3	3 less.	120	+10	15·0	+ 0·7	40	35	935	− 29	33	0
	2. ENGLAND, N.E.	4	5	1 less.	118	+11	16·4	+ 1·5	29	26	748	−138	26	− 5
	3. ENGLAND, EAST	4	4	2 less.	114	+ 4	13·6	− 1·5	22	20	956	−118	34	− 4
	4. MIDLAND COUNTIES*	4	4	2 less.	116	+ 8	18·7	+ 2·6	26	24	814	−130	29	− 4
	5. ENGLAND, SOUTH	3	3	2 less.	107	+ 4	15·7	+ 0·6	32	30	989	− 23	35	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	3	4 less.	122	+ 1	23·6	+ 1·9	44	40	824	− 97	29	− 3
	7. ENGLAND, N.W.	4	7	0 (average).	120	+ 8	22·7	+ 4·3	43	39	824	−104	29	− 3
	8. ENGLAND, S.W.	4	6	2 less.	120	+ 2	22·4	− 0·9	37	35	993	− 91	35	− 3
	9. IRELAND, NORTH	4	6	1 less.	129	− 6	21·4	+ 1·6	23	21	712	−157	25	− 5
	10. IRELAND, SOUTH	4	10	3 more.	124	− 3	23·5	+ 1·1	29	27	852	−125	30	− 4
	— CHANNEL ISLANDS	3	4	1 less.	135	+10	18·5	+ 1·0	44	42	1193	− 99	43	− 3

General Remarks.

Weather has continued in a very unsettled condition generally, with cloudy or overcast skies and occasional falls of rain.

Temperature has been below the mean in all districts, the deficit ranging from 2° in the "Channel Islands" and 3° in the south and south-west of England, to as much as 5° in all other parts of England, the north of Ireland, and the east of Scotland, and to 6° in "Scotland, N." The highest of the maxima, which were registered on different days in the various districts, ranged from 74° in "England, S." to 63° in "Scotland, W." and to 57° in "Scotland, N." On July 27th the daily maxima at nearly all of our stations were below 60°. The lowest of the minima, which were generally recorded either on July 28th or 29th, ranged from 30° in "Scotland, N." (at Wick), 38° in the "Midland Counties", and 39° in "England, S.W.", to 51° in the "Channel Islands".

Rainfall has been more than the mean in "Scotland, N." and "Ireland, S." and equal to it in "England, N.W.", but rather less in all other districts.

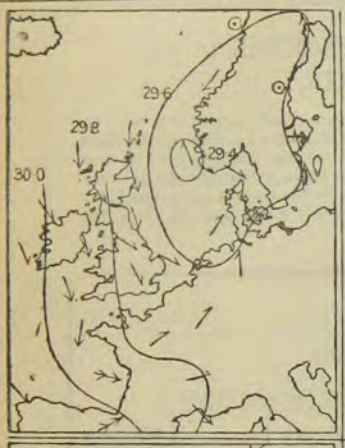
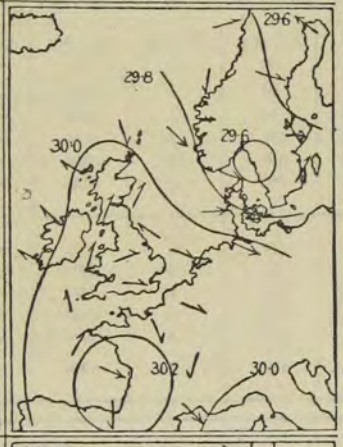
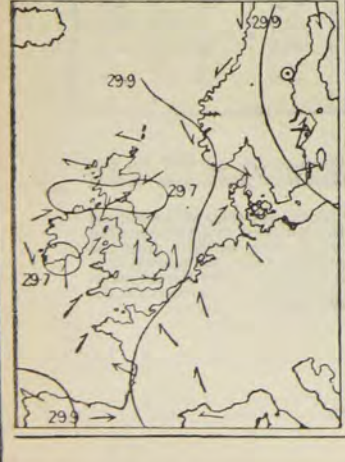
Bright sunshine has not differed materially from that recorded last week, the percentages of the possible amount of duration ranging from 19 in "Scotland, N." to 39 in "England, N.W.", and 42 in the "Channel Islands".

Depressions observed.—Barometric pressure over our Islands and their neighbourhood has continued in an unstable condition, the mercury being highest over Spain and the south of France, while several small, shallow depressions have travelled from the westward over the United Kingdom and the North Sea. Moderate to fresh breezes, from the Southward as the disturbances advanced, and from the Westward or Northward as they passed away, have consequently been prevalent on most parts of our coasts; in the extreme north, however, moderate Easterly airs were experienced on 30th July.

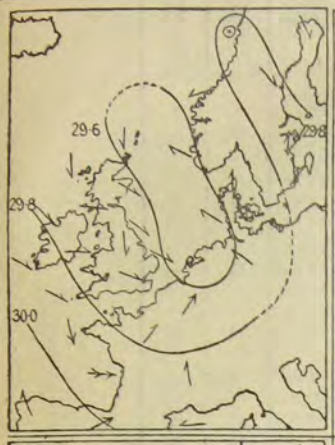
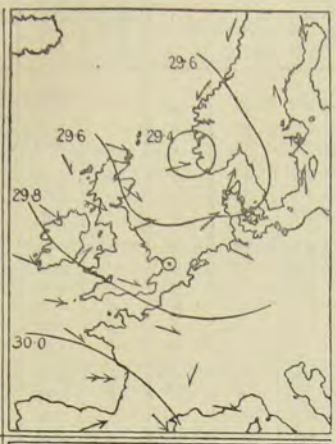
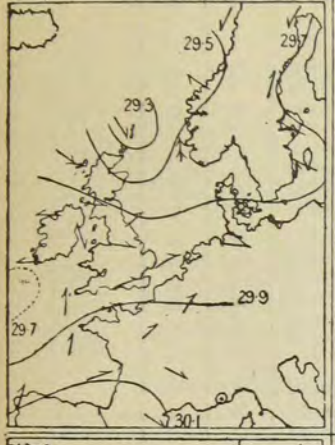
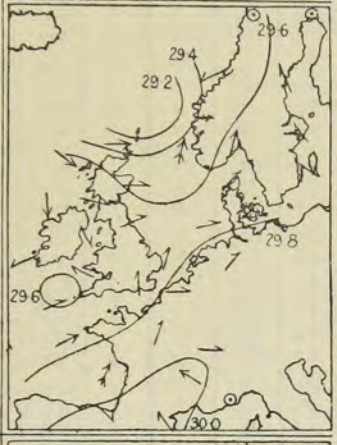
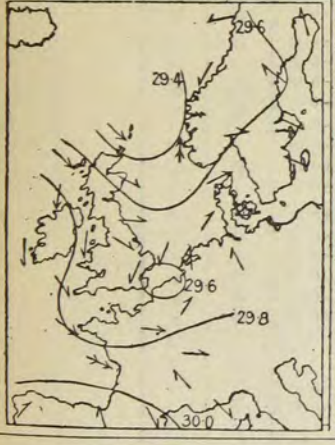
* The accumulated values in this district are liable to alteration owing to the non-arrival of the Return from Churchstoke

E 23170. 350.—8/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, July 27.** *Weather* cloudy or overcast at most stations, with rain at Stornoway and Biarritz and passing showers at Nairn, Spurn Head, and Scilly. Showers falling later at many of our northern and eastern stations. *Temperature* fallen in most places; readings ranging from 62° at Prawle Point to 47° at Sumburgh Head, Stornoway, and Aberdeen. *Wind* Southerly or South-Easterly on the eastern shores of the North Sea, but North-Westerly or Northerly in our Islands and Westerly or South-Westerly in in France; fresh or strong in force on our north and north-west coasts. *Sea* high at Aberdeen and rather rough in the north-east and north-west generally as well as at Scilly. *Barometer* rising at all but the Norwegian stations. Pressure highest in Spain, with a well-defined depression off the south of Norway. Depression subsequently moving eastwards, and barometric rise becoming general.	
		**Wednesday, July 28.** *Weather* rainy in the south of Norway as well as in the Shetlands, but fair or fine elsewhere. Subsequently becoming dull and unsettled in extreme west. *Temperature* risen a little in our Islands, but fallen at most of the Continental stations; readings over the United Kingdom now ranging from 59° at Scilly to 46° in the Shetlands. *Wind* South-Easterly in Ireland, but Westerly or North-Westerly elsewhere; light or moderate in force in most places, but strong on the eastern shores of the North Sea. Subsequently backing to South-West or South at all our western stations. *Sea* rather rough at Sumburgh Head and Spurn Head, but moderate to smooth elsewhere. *Barometer* rising at all stations excepting Valencia. Anticyclone lying over the Bay of Biscay and west of France, and depression of previous day now shown near the Skager Rack. Fall taking place later on all our western coasts.	
		Thursday, July 29. *Weather* dull and rainy in the west, but generally fine elsewhere. Rain falling later at all but our south-eastern stations. *Temperature* risen a little in most parts of the Kingdom; readings now ranging from 61° at Valencia, Scilly, and in London to 47° in the Shetlands. *Wind* strong from West or North-West on the eastern shores of the North Sea, but light or moderate from South-East in the north of our Islands and from South-West in the south. *Sea* rather rough at Pembroke, but moderate to smooth elsewhere. *Barometer* falling in our Islands and the west of France, but rising in most other localities. Anticyclone lying over France, with the depression of the past two days over the south of Sweden, and some new but shallow disturbances over our western coasts. Fall continuing over our Islands all day.	
		**Friday, July 30.** *Weather* fair at our extreme south-eastern and most of the Continental stations, but dull elsewhere, with rain in many places. Rain extending to the south-east later, but weather improving in west. *Temperature* risen a little over England and the north of Ireland, but fallen elsewhere; readings over our Islands ranging from 65° at Cambridge to 50° at Sumburgh Head and Nairn. *Wind* Northerly in the west of Norway and variable in Ireland, but Southerly or South-Westerly in England and France, and South-Easterly or Easterly in Scotland, light or moderate in force generally. North-Westerly breezes setting in on our west coasts later. *Sea* slight or smooth. *Barometer* falling at all but the Scandinavian stations. Areas of high pressure lying over Spain and Central Europe, with a large and irregularly formed area of low readings over our Islands. Low pressure system subsequently moving eastwards, and barometer rising in west.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, July 31.** *Weather* fair in most localities, but rain falling in the south of Norway and the Netherlands as well as at Yarmouth. Showers reported later in many parts of the United Kingdom, with a thunderstorm at Shields. *Temperature* fallen a little in France and the east of England, but risen elsewhere; readings ranging from 60° at Scilly, Jersey, and Dungeness to 50° at Stornoway. *Wind* South-Easterly on the eastern shores of the North Sea, but North-Westerly in our Islands and Westerly in France; moderate in force in most places. *Sea* moderate to smooth. *Barometer* rising over England, Ireland, and France, but falling elsewhere. Low pressure system of previous day now lying over the North Sea. Definite depression subsequently forming off the south of Norway, and barometer continuing to fall at several of the northern stations.	
		**Sunday, August 1.** *Weather* rainy in the extreme north of Scotland and dull on our south-west coasts, but fair or fine elsewhere. Rain setting in at many of our southern stations later. *Temperature* risen a little at some of our south-eastern stations and also in Scandinavia, but fallen elsewhere; readings over our Islands ranging from 62° at Hurst Castle to 50° at Sumburgh Head, Stornoway, and Nairn. *Wind* strong North-Westerly in the north of Scotland, moderate Westerly on our east and south coasts, and Southerly in the west of Norway, but shifting to South-East or East in the west of Ireland. Subsequently backing to South in the south-east of England. *Sea* moderate to smooth. *Barometer* rising at our eastern and most of the Continental stations, but falling elsewhere. Depression lying near the Shetlands, and new disturbance approaching our south-west coasts. Former disturbance subsequently moving northwards, but latter advancing over southern England.	
		**Monday, August 2.** *Weather* dull and rainy in the north of Scotland, the south-east of England, and some parts of France, but fair in most other localities. Improvement taking place in south-east later. *Temperature* fallen at all but the Irish and French stations; readings over our Islands ranging from 61° at Dungeness to 49° at Wick and 47° at Shields. *Wind* North-Westerly or Northerly over the greater part of our Islands, but Westerly in France and Southerly on the eastern shores of the North Sea. Strong in force in the North of Scotland, and also over the Bay of Biscay. *Sea* rather rough off the North of Scotland, and also in the western part of the Channel, but moderate to smooth elsewhere. *Barometer* rising on our western and northern coasts, but falling elsewhere. Pressure highest in Spain, with a depression to the northward of the Shetlands, and another off the south-east of England. Both disturbances moving north-eastwards later, and barometer rising generally.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇛ = a heavy gale; ⇒ = a gale; → = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 121 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	57	42	52·7	45·3	48·7	− 5·0	47	0	5	0·99	+0·42	*	*
	Stornoway	57	43	55·4	45·3	50·0	− 4·7	56	0	7	1·45	+0·71	22	19
	Wick	57	30	54·3	42·3	47·9	− 7·2	41	0	5	0·30	−0·22	*	*
1. SCOTLAND, E.	Nairn	62	44	58·4	46·1	51·8	− 5·9	69	0	4	0·21	−0·39	*	*
	Aberdeen	61	45	58·4	46·6	52·1	− 5·1	71	0	3	0·33	−0·35	40	35
	Leith	68	45	63·4	47·3	54·8	− 3·7	90	0	4	0·33	−0·28	*	*
2. ENGLAND, N.E.	Alnwick Castle	61	42	59·1	46·7	52·5	− 4·8	74	0	6	0·62	−0·05	*	*
	Durham	67	41	63·0	46·2	54·0	− 4·4	84	0	4	0·59	−0·04	28	25
	Shields	63	42	59·7	46·7	52·8	− 5·4	76	0	3	0·66	+0·04	*	*
	Scarborough ⚓	66	45	60·6	50·2	55·0	− 4·4	91	0	3	0·43	−0·17	*	*
	York	66	44	62·4	48·7	55·1	− 6·1	92	0	4	0·45	−0·11	29	26
	Spurn Head	63	50	60·1	52·4	56·0	− 4·0	98	0	5	0·12	?	*	*
3. ENGLAND, E.	Hillington ⚓	70	45	64·1	48·4	55·7	− 4·8	96	0	3	0·37	−0·23	16	15
	Yarmouth	67	47	63·7	52·4	57·7	− 3·6	110	0	5	0·63	+0·08	*	*
	Geldeston	71	45	64·0	50·0	56·5	− 4·6	102	0	5	0·46	−0·02	24	22
	Cambridge	71	46	65·9	51·0	57·9	− 4·8	111	0	4	0·42	−0·10	25	23
	Rothamsted	70	42	64·6	49·1	56·3	− 5·9	110	0	5	0·14	−0·46	*	*
	Ingatestone	70	44	64·7	50 7	57·2	− 5·7	106	0	4	0·21	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	67	45	62·9	49·7	55·8	− 5·6	97	0	3	0·55	−0·05	22	20
	Loughborough	69	47	64·7	50·9	57·3	− 4·6	107	0	4	0·18	−0·36	*	*
	Leicester	70	47	65·3	51·2	57·9	− 4·0	111	0	4	0·33	−0·29	23	21
	Cheadle ⚓	64	44	60·5	48·5	54·1	− 5·9	85	0	5	0·87	+0·11	*	*
	Churchstoke ⚓								0					
	Hereford ⚓	69	42	65·0	50·8	57·5	− 4·0	109	0	4	0·27	−0·26	*	*
	Cirencester	67	38	63·3	49·4	55·9	− 5·3	97	0	4	0·48	−0·24	30	28
	Oxford	69	44	64·4	52 6	58·1	− 3·3	113	0	4	0·41	−0·14	29	27
5. ENGLAND, S.	London†	73	45	67·0	52·9	59·5	− 3·9	123	0	4	0·19	−0·31	27	25
	Strathfield Turgiss ⚓	74	44	69·3	50·9	59·5	− 1·9	123	0	2	0·17	−0·35	*	*
	Dungeness	68	46	64·4	54·6	59·2	− 2·5	120	0	4	0·46	+0·03	*	*
	Hastings (St. Leonard's)	67	46	63·7	52·9	57·9	− 3·6	111	0	3	0·37	−0·11	32	30
	Southampton	74	48	68·0	53·6	60·3	− 1·4	128	0	2	0·23	−0·34	38	36
	Hurst Castle	70	49	65·6	54·7	59·8	− 1·4	125	0	2	0·20	−0·29	*	*
	Stowell ⚓	68	47	64·2	51·7	57·5	− 2·9	109	0	4	0·38	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	61	46	56·8	48·6	52·4	− 4·2	73	0	5	0·15	−1·03	*	*
	Glasgow	63	41	59·2	47·5	52·9	− 4·8	76	0	1	0·29	−0·55	35	32
	Ardrossan	63	44	61·1	48·4	54·3	− 3·4	86	0	2	0·42	−0·37	*	*
	Douglas (Isle of Man)	63	44	59·2	49·4	54·0	− 3·7	84	0	3	0·43	−0·31	52	47
7. ENGLAND, N.W.	Newton Reigny (Penrith)	63	43	58·7	46·5	52·2	− 6·1	71	0	4	0·88	+0·18	41	37
	Barrow-in-Furness	60	48	58·6	50·9	54·5	− 5·3	88	0	3	0·69	−0·05	*	*
	Stonyhurst	62	41	59·3	48·0	53·3	− 5·8	79	0	4	0·65	−0·38	43	39
	Blackpool ⚓	61	47	59·3	50·8	54·8	− 5·5	90	0	5	0·64	−0·06	46	42
	Manchester	65	48	60·6	50·1	55·0	− 5·4	91	0	4	0·59	−0·21	*	*
	Liverpool Obsy (Bidston)	63	49	60·6	51·9	56·0	− 4·7	98	0	3	0·56	−0·08	*	*
	Llandudno ⚓	63	50	60·9	51·4	55·8	− 4·9	97	0	4	0·78	+0·18	40	37
	Holyhead	62	50	60·3	52·1	55·9	− 3·6	97	0	4	1·00	+0·41	*	*
8. ENGLAND, S.W.	Llandovery	69	39	66·1	48·1	56·5	− 4·0	102	0	5	1·16	+0·21	*	*
	Pembroke	63	52	60·4	53·9	56·9	− 3·0	104	0	4	0·11	−0·50	41	38
	Arlington (N. Devon)	64	47	61·9	51·3	56·2	− 4·3	99	0	4	0·65	−0·57	*	*
	Cullompton ⚓	67	46	65·6	51·6	58·1	− 3·4	113	0	3	0·31	−0·31	28	26
	Falmouth	65	50	62·9	52·7	57·4	− 3·8	108	0	4	0·68	−0·09	41	39
	Plymouth	68	49	65·5	53·4	59·0	− 2·7	119	0	4	0·58	−0·05	39	37
	Prawle Point	65	48	63·0	52·6	57·4	− 2·4	108	0	4	0·67	?	*	*
9. IRELAND, N.	Malin Head	62	40	58·4	49·3	53·5	− 3·5	81	0	4	0·57	?	*	*
	Londonderry	67	45	63·0	47·8	54·9	− 3·6	90	0	4	0·71	−0·08	*	*
	Mullaghmore	66	50	61·1	51·7	56·1	− 3·3	99	0	5	0·30	−0·51	*	*
	Belmullet	62	46	59·7	49·6	54·3	− 3·4	86	0	3	0·42	?	*	*
	Markree Castle	66	43	60·6	47·5	53·8	− 5·8	83	0	4	0·31	−0·47	25	23
	Brookeborough	66	41	61·2	45·7	52·9	− 6·8	76	0	4	0·85	?	*	*
	Armagh	64	41	61·2	46·8	53·5	− 6·3	81	0	4	0·73	+0·08	21	19
	Donaghadee	62	44	58·4	47·6	52·7	− 5·5	75	0	3	0·68	+0·03	*	*
	Edgeworthstown	67	43	62·4	47·6	54·5	− 5·3	88	0	3	1·12	+0·32	*	*
10. IRELAND, S.	Dublin	66	49	62·0	51·2	56·2	− 3·6	99	0	4	0·59	−0·01	27	25
	Parsonstown	66	45	62·7	48·0	54·8	− 4·6	90	0	5	0·50	−0·23	28	26
	Kilkenny	68	43	63·1	48·4	55·2	− 4·9	92	0	5	0·86	+0·26	*	*
	Waterford	70	45	64·9	49·8	56·8	− 3·8	104	0	4	1·96	+1·26	*	*
	Roche's Point	65	45	62·0	50·4	55·8	− 4·9	97	0	4	1·58	+0·84	*	*
	Valencia	64	49	62·7	52·1	57·0	− 2·2	105	0	5	0·76	−0·19	32	30
	Killarney	64	43	62·2	50·0	55·7	− 3·9	96	0	4	1·22	?	*	*
	Foynes	63	47	61·7	50·6	55·8	− 3·4	97	0	4	0·42	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	55	62·4	55·6	58·8	− 1·0	118	0	4	0·52	−0·01	*	*
	Jersey (Noirmont)	67	51	64·0	55·0	59·2	− 2·8	120	0	2	0·27	−0·23	44	42

Stations marked ⚓ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 32.] *New Series.* WEEK ENDING MONDAY, 9TH AUGUST, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 128.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	62	30	58·2	46·4	51·9	3 below.	69	0	909	−225	669	+159
	1. SCOTLAND, EAST	73	38	65·5	48·5	56·5	1 below.	102	0	1327	−183	734	+191
	2. ENGLAND, N.E.	77	41	66·5	51·2	58·3	0 (average).	114	0	1368	−234	697	+215
	3. ENGLAND, EAST	77	40	69·8	51·8	60·2	1 below.	127	0	1677	−197	750	+243
	4. MIDLAND COUNTIES*	79	39	69·4	51·2	59·8	1 below.	125	0	1702 *	−180	721	+217
	5. ENGLAND, SOUTH	81	43	68·7	55·0	61·4	0 (average).	136	0	1846	−170	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	67	40	62·0	50·0	55·7	2 below.	96	0	1281	−307	579	+181
	7. ENGLAND, N.W.†	68	38	63·3	51·1	56·8	3 below.	104	0	1458	−223	612	+229
	8. ENGLAND, S.W.	76	39	66·0	53·6	59·5	1 below.	123	0	1716	−201	490	+257
	9. IRELAND, NORTH	72	38	64·6	52·2	58·1	1 below.	113	0	1437	−226	492	+142
	10. IRELAND, SOUTH	74	43	66·3	53·7	59·6	0 (average).	123	0	1693	−202	401	+162
	— CHANNEL ISLANDS	71	53	65·5	56·4	60·7	1 below.	131	0	1883	−162	202	+109

Rainfall.

	DISTRICTS. (See p. 128.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.				Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	3	3 less.	158	+22	20·2	+ 0·5
	1. SCOTLAND, EAST	4	2	4 less.	124	+ 9	15·2	+ 0·3
	2. ENGLAND, N.E.	2	2	4 less.	120	+ 9	16·6	+ 1·1
	3. ENGLAND, EAST	2	4	1 less.	116	+ 3	14·0	− 1·6
	4. MIDLAND COUNTIES*	2	6	0 (average).	118	+ 6	19·4 *	+ 2·7
	5. ENGLAND, SOUTH	2	2	3 less.	109	+ 3	15·9	+ 0·3
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	3	5 less.	125	0	23·9	+ 1·4
	7. ENGLAND, N.W.†	3	5	2 less.	123	+ 7	23·2	+ 4·0
	8. ENGLAND, S.W.	4	6	2 less.	124	+ 2	23·0	− 1·1
	9. IRELAND, NORTH	3	3	5 less.	132	− 8	21·7	+ 1·1
	10. IRELAND, SOUTH	3	2	6 less.	127	− 4	23·7	+ 0·6
	— CHANNEL ISLANDS	5	6	1 more.	140	+10	19·1	+ 1·1

Bright Sunshine.

	DISTRICTS. (See p. 128.)	For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	34	31	916	+ 48	31	+ 2
	1. SCOTLAND, EAST	43	39	978	− 24	33	0
	2. ENGLAND, N.E.	41	39	789	−136	27	− 4
	3. ENGLAND, EAST	38	36	994	−121	34	− 4
	4. MIDLAND COUNTIES*	39	37	855 *	−129	29	− 4
	5. ENGLAND, SOUTH	31	30	1020	− 37	35	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	34	32	858	−105 *	29	− 3
	7. ENGLAND, N.W.†	42	39	866	−199	29	− 3
	8. ENGLAND, S.W.	25	24	1018	−112	35	− 3
	9. IRELAND, NORTH	20	19	732	−168	25	− 5
	10. IRELAND, SOUTH	24	23	876	−140	30	− 4
	— CHANNEL ISLANDS	47	46	1240	−111	43	− 3

General Remarks.

Weather was generally fair during the earlier part of the period but towards its close the sky became cloudy or overcast and at most of our stations falls of rain occurred.

Temperature has been about equal to the mean in "England, N.E.", "England, S.", and "Ireland, S.", but in the other districts it has varied between 1° and 3° below. The highest of the maxima, which were registered in most places either on the 6th or 7th, ranged from 62° to 73° in Scotland, from 72° to 74° in Ireland, and over England from 68° in "England, N.W." to 79° in the "Midland Counties" and to 81° in "England, S." The lowest of the minima were recorded either on the 3rd or 4th, when the thermometer fell to 30° in "Scotland, N." (at Wick), to 38° in "Scotland, E.", "England, N.W.", and "Ireland, N.", to between 39° and 43° over England, and to 53° in the "Channel Islands". Towards the end of the week the nights were warm and close, the thermometer at many of our southern stations not descending to 60°; at Hereford and in London the minimum temperature during the night of the 8th—9th was no lower than 63°.

Rainfall has about equalled the mean in the "Midland Counties," but has been less in all other districts except the "Channel Islands," where a slight excess is shown.

Bright sunshine has been more prevalent than it was last week in the "Wheat-producing districts", but less so in the "Grazing districts". The percentages of the possible amount of duration ranged from 19 in "Ireland, N." to 39 in "Scotland, E." and "England, N.E.", and to 46 in the "Channel Islands".

Depressions observed.—During the earlier part of the week the distribution of pressure over the United Kingdom was anticyclonic and the wind light and variable; on the 5th, however, the barometer fell decidedly on our western and northern coasts and the high pressure area moved southwards. During the remainder of the period, small shallow depressions passed in an easterly direction over our Islands, the wind became light or moderate from between south and west, and the weather cloudy and unsettled.

* These values have been altered slightly, owing to the receipt of some arrears of observations from Churchstoke.
† The accumulated values in this district are liable to alteration owing to the non-arrival of the Return from Llandudno.

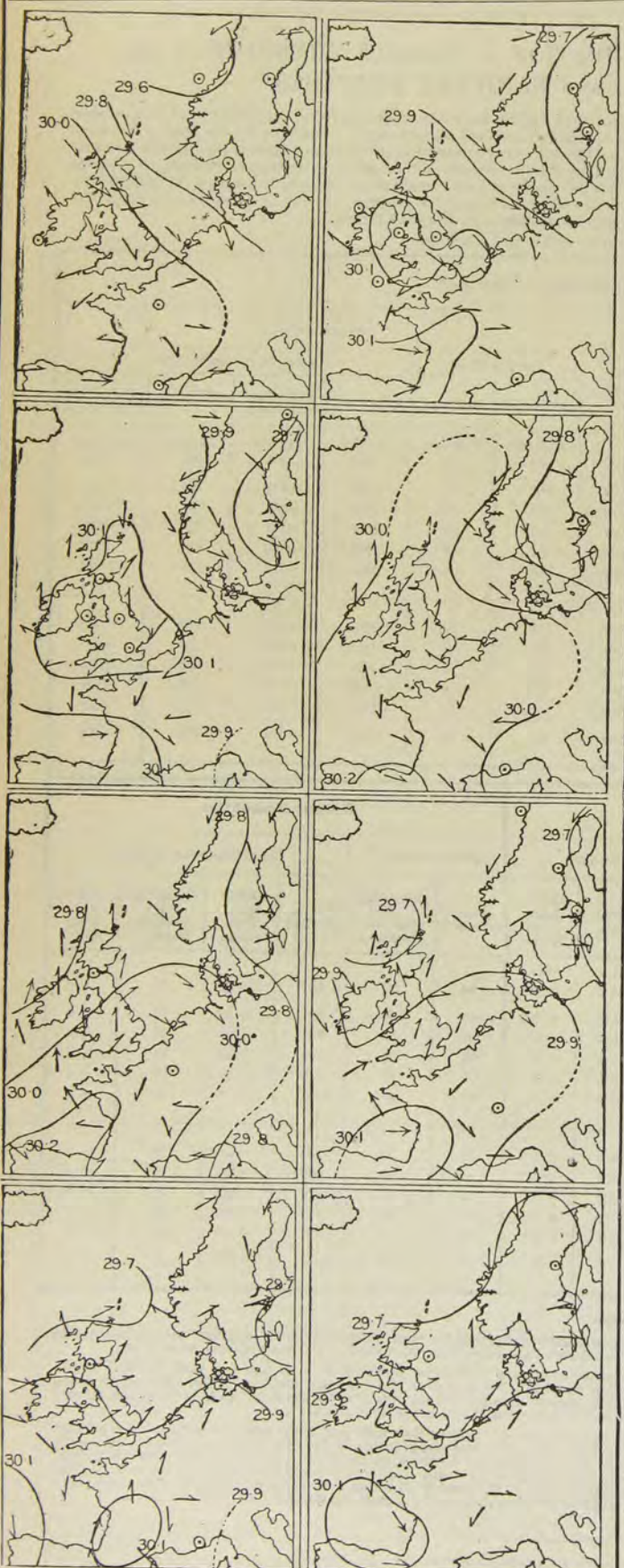
E 23238. 350.—8/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.



Weather

During the 24 hours succeeding

8 a.m. on the dates given.

Tuesday, August 3.

Weather fair generally, but solar halos reported at some of the English stations. Rain falling in south of Ireland later.

Temperature fallen a little over the Netherlands and south-east of England, but changed little and irregularly elsewhere; readings over our Islands ranging from 61° at Scilly and Jersey to 48° at Stornoway and Wick. Thermometer at Wick falling to 30° during night.

Wind moderate or fresh from North-West on our north and east coasts and also on the eastern shores of the North Sea, but light from North-East at the Channel stations, and from East or South-East in Ireland.

Sea rather rough at Sumburgh Head, but moderate to smooth elsewhere.

Barometer rising generally. Large area of high pressure, with readings between 30·0 ins. and 30·1 ins., lying over the greater part of our Islands and France. Rise continuing all day.

Wednesday, August 4.

Weather fair in most places, but fog reported in the east of Scotland and rain at Roche's Point and Jersey. Rain ceasing later.

Temperature risen a little in most places; readings ranging from 62° at Prawle Point to 48° at Sumburgh Head.

Wind light or moderate from South-East on our extreme west and north-west coasts, and strong from North-West on the eastern shores of the North Sea, but light from North-East at our southern stations and Westerly over the Bay of Biscay. Subsequently backing to the Southward at all but our south-eastern stations.

Sea moderate to smooth.

Barometer rising on all but our western and northern coasts. Areas of high pressure lying over our Islands and France, with relatively low readings in Sweden. Depressions subsequently appearing off the west of Ireland, and barometer falling a little over the greater part of the Kingdom.

Thursday, August 5.

Weather dull on our western and extreme northern coasts as well as on the eastern shores of the North Sea, but fair or fine elsewhere. Rain falling later at all but our south-eastern stations.

Temperature risen a little in our Islands, but fallen at most of the Continental stations; readings ranging from 61° at Parsonstown and Scilly to 51° at Sumburgh Head.

Wind moderate to strong from North-West or North on the eastern shores of the North Sea, but South-Westery or Southerly in our Islands and Easterly in the west of France; fresh or strong in force on our extreme north-west coasts. Subsequently veering to North-West in the west of Ireland.

Sea rather rough at Stornoway and Scilly, but moderate to smooth elsewhere.

Barometer falling in our Islands, but rising at most of the of the Continental stations. Pressure highest over Spain and the southern parts of the Bay of Biscay, and lowest in Sweden, but depression approaching our western coasts. Rise taking place in Ireland later.

Friday, August 6.

Weather fine in the north of Scandinavia and also on the east coasts of Great Britain, but cloudy or overcast elsewhere, with drizzling rain on our north-west coasts. Rain falling later at all but our south-eastern stations.

Temperature risen a little in most places; readings ranging from 64° at York, Roche's Point, Cambridge, and in London to 51° at Stornoway. Subsequently rising to 74° at York, 76° at Loughborough, and 77° at Oxford, Cambridge, and in London.

Wind Westerly or North-Westerly on many parts of our western coasts, but South-Westerly in the north and east of our Islands, and Southerly in the west and north of France; light or moderate in force generally.

Sea rather rough at Scilly, but moderate to smooth elsewhere.

Barometer falling at all but our western stations. Areas of high pressure lying over France and Spain, with shallow depressions over our north and east coasts. Fresh fall setting in on our west coasts later.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

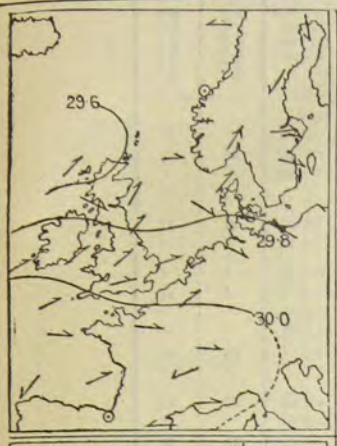
Weather

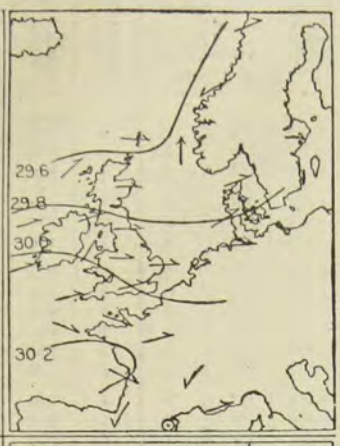
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, August 7.

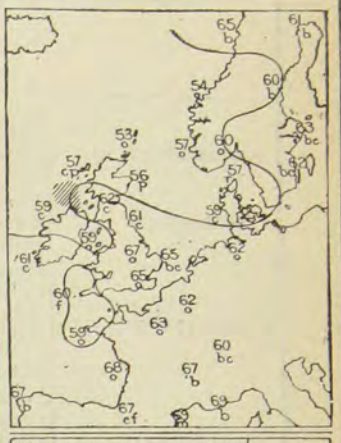
Weather fair in most places, but showery at some of our northern stations and foggy in the south-west of England.

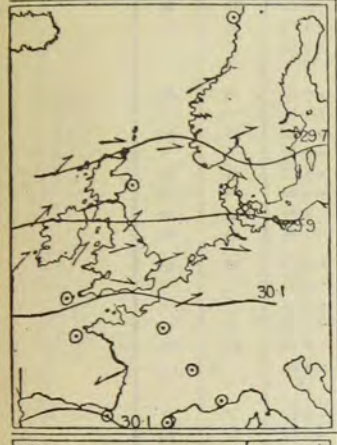
Temperature risen a little in most places; readings over our Islands now ranging from 67° at Loughborough to 53° at Sumburgh Head. Subsequently rising to 73° at Aberdeen and Oxford, 76° at Loughborough, Yarmouth, and in London, and 77° at Cambridge.

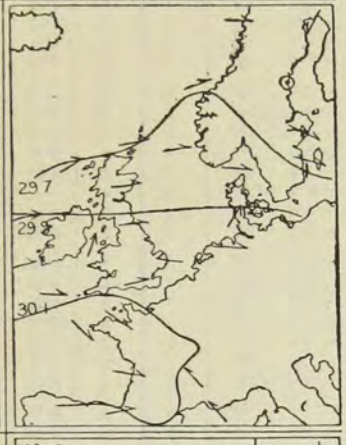
Wind light from South-West on our east coasts, but moderate or fresh from West in the west and south. Subsequently veering to West in the east.

Sea rather rough at Malin Head, but moderate to smooth elsewhere.

Barometer falling on our more northern coasts, but rising at our southern and the French stations. Area of high pressure lying over France and the Bay of Biscay, with a depression off the north of Scotland. Depression subsequently moving north-eastwards, and barometer rising a little in the north-west.







Sunday, August 8.

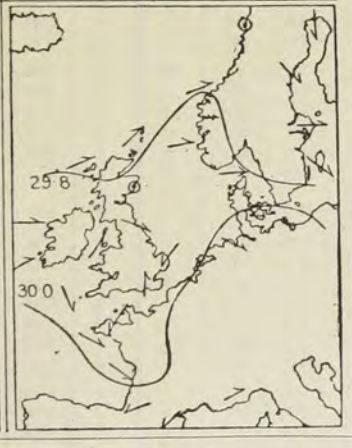
Weather fair generally, but foggy at some of the Channel stations and showery at Malin Head. Slight rain falling later in many parts of our Islands.

Temperature risen a little in Denmark and the north-east of Great Britain, but fallen elsewhere; readings over our Islands ranging from 67° in London and at Cambridge to 53° in the Shetlands. Subsequently rising to 72° at Loughborough, 73° at Cambridge and Yarmouth, and 75° in London.

Wind variable in France, but light or moderate from South-West or West elsewhere.

Sea moderate to smooth generally, but rather rough at Valencia.

Barometer falling a little over the Bay of Biscay and our extreme south-west coasts, but rising in most other localities. Band of high readings lying over France and the Bay of Biscay, with a large depression to the northward of our Islands. No important change later.



Monday, August 9.

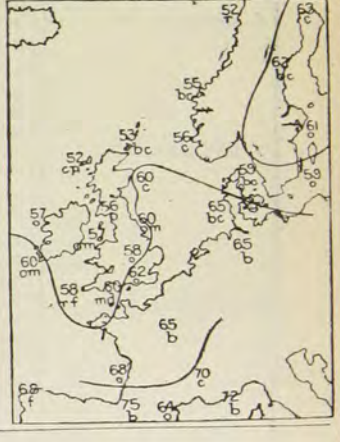
Weather fair on our north and north-east coasts, as well as at many of the continental stations, but dull elsewhere, with rain in the south-west of England, and fog in the Channel. Thunderstorm occurring at Jersey at night.

Temperature fallen a little in most places; readings ranging from 63° at Cambridge and Yarmouth to 52° at Stornoway.

Wind North-Easterly in the south-west of England, and variable in France, but South-Westerly or Westerly elsewhere; light or moderate in force generally. Subsequently becoming variable on our south-east coasts.

Sea moderate to smooth.

Barometer falling at our southern and the French stations, but rising elsewhere. Pressure highest in France, and lowest to the northward of our Islands, but large area of relatively low readings approaching our south-west coasts. Fall extending later to all parts of our Islands.



Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 125 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	58	43	55·6	46·4	50·7	− 3·2	61	0	5	0·22	−0·38	*	*
	Stornoway	62	39	59·3	47·0	52·8	− 1·9	76	0	6	0·42	−0·34	34	31
	Wick	62	30	59·6	45·7	52·2	− 2·9	71	0	3	0·26	−0·26	*	*
1. SCOTLAND, E.	Nairn	70	40	65·1	48·7	56·4	− 0·9	101	0	5	0·16	−0·44	*	*
	Aberdeen	73	38	65·1	47·4	55·8	− 1·2	97	0	3	0·39	−0·30	43	39
	Leith	69	42	66·3	49·3	57·3	− 0·9	107	0	3	0·06	−0·54	*	*
2. ENGLAND, N.E.	Alnwick Castle	69	44	64·0	52·0	57·6	+ 0·5	109	0	2	0·11	−0·56	*	*
	Durham	77	41	68·8	49·5	58·6	+ 0·9	116	0	2	0·07	−0·56	44	41
	Shields	70	43	65·9	49·3	57·1	− 0·9	106	0	2	0·12	−0·50	*	*
	Scarborough ℳ	72	45	67·1	52·4	59·3	+ 0·1	121	0	2	0·26	−0·34	*	*
	York	74	43	68·4	50·4	58·5	− 2·0	116	0	2	0·57	+0·01	38	36
	Spurn Head	68	49	64·7	53·7	58·9	− 0·7	118	0	3	0·12	?	*	*
3. ENGLAND, E.	Hillington ℳ	76	40	69·7	50·2	59·4	− 1·0	122	0	4	0·65	+0·05	43	41
	Yarmouth	76	44	68·0	53·7	60·4	− 0·8	129	0	2	0·26	−0·26	*	*
	Geldeston	77	40	69·0	50·2	59·0	− 2·1	119	0	1	0·14	−0·31	32	30
	Cambridge	77	45	71·9	51·7	61·2	− 1·2	134	0	1	0·36	−0·16	38	36
	Rothamsted	76	42	70·2	52·3	60·6	− 1·3	130	0	2	0·11	−0·38	*	*
	Ingatestone	75	43	69·9	?52·6	?60·7	−?2·0	?131	0	3	0·76	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	73	41	69·7	50·0	59·3	− 1·6	121	0	3	0·48	−0·09	35	33
	Loughborough	76	43	71·1	51·3	60·6	− 1·2	130	0	2	0·71	+0·15	*	*
	Leicester	78	44	70·3	51·6	60·4	− 1·5	129	0	1	1·03	+0·41	38	36
	Cheadle ℳ	72	42	66·1	50·1	57·6	− 2·3	109	0	2	0·65	−0·14	*	*
	Churchstoke ℳ	72	41	66·9	48·9	57·4	− 2·5	108	0	2	0·56	−0·02	41	39
	Hereford ℳ	79	43	?73·6	?53·2	?62·8	+?1·4	?146	0	0	—	−0·55	*	*
	Cirencester	75	39	68·1	50·3	58·7	− 2·3	117	0	2	0·72	0·00	40	38
	Oxford	77	43	69·6	54·3	61·5	+ 0·1	137	0	2	0·56	+0·01	42	40
5. ENGLAND, S.	London†	77	46	71·1	54·6	62·4	− 0·6	143	0	2	0·26	−0·24	33	32
	Strathfield Turgiss ℳ	81	48	73·4	55·9	64·1	+ 2·7	155	0	1	0·02	−0·50	*	*
	Dungeness	67	43	65·3	54·4	59·5	− 1·9	123	0	1	0·25	−0·19	*	*
	Hastings (St. Leonard's)	67	47	65·1	55·6	60·1	− 1·4	127	0	3	0·17	−0·32	29	28
	Southampton	78	47	71·8	55·4	63·1	+ 1·4	148	0	2	0·12	−0·46	30	29
	Hurst Castle	70	49	67·3	56·0	61·3	0·0	135	0	3	0·16	−0·34	*	*
	Stowell ℳ	72	43	66·8	53·0	59·5	− 0·9	123	0	4	0·40	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	63	41	61·7	50·6	55·8	− 1·1	97	0	5	0·44	−0·71	*	*
	Glasgow	63	42	61·8	49·2	55·1	− 2·5	92	0	3	0·24	−0·60	27	25
	Ardrossan	64	43	61·6	50·1	55·5	− 2·2	95	0	2	0·08	−0·77	*	*
	Douglas (Isle of Man)	67	40	63·0	50·2	56·2	− 1·5	99	0	2	0·59	−0·18	41	38
7. ENGLAND, N.W.	Newton Reigny (Penrith)	67	38	63·9	47·4	55·2	− 3·0	92	0	1	0·29	−0·42	42	39
	Barrow-in-Furness	62	48	61·0	52·3	56·4	− 3·5	101	0	2	0·94	+0·19	*	*
	Stonyhurst	65	41	62·7	49·3	55·6	− 3·6	95	0	3	0·98	−0·05	41	38
	Blackpool ℳ	65	38	63·0	50·9	56·6	− 3·7	102	0	2	0·42	−0·27	42	39
	Manchester	68	42	64·9	50·5	57·3	− 3·0	107	0	4	0·58	−0·22	*	*
	Liverpool Obsy (Bidston)	68	48	65·4	53·7	59·2	− 1·5	120	0	4	0·24	−0·40	*	*
	Llandudno ℳ													
	Holyhead	66	46	62·3	53·4	57·6	− 2·1	109	0	2	0·15	−0·45	*	*
8. ENGLAND, S.W.	Llandovery	76	39	71·7	51·9	61·2	+ 0·8	134	0	4	0·47	−0·50	*	*
	Pembroke	65	51	62·0	55·6	58·6	− 1·1	116	0	4	0·18	−0·45	39	37
	Arlington (N. Devon)	?66	43	63·9	50·4	56·8	− 3·6	104	0	5	0·65	−0·59	*	*
	Cullompton ℳ	72	41	68·5	52·4	60·0	− 1·5	126	0	2	0·68	+0·06	19	18
	Falmouth	68	48	65·9	55·1	60·2	− 0·9	127	0	4	0·65	−0·12	23	22
	Plymouth	71	47	66·7	55·1	60·6	− 1·1	130	0	3	0·99	+0·36	20	19
	Prawle Point	69	48	63·6	54·7	58·9	− 0·9	118	0	4	0·45	?	*	*
9. IRELAND, N.	Malin Head	64	50	61·6	53·0	57·0	− 0·1	105	0	4	0·24	?	*	*
	Londonderry	71	49	67·2	52·2	59·3	+ 0·8	121	0	1	0·25	−0·54	*	*
	Mullaghmore	67	50	63·4	54·7	58·8	− 0·6	118	0	3	0·44	−0·36	*	*
	Belmullet	65	50	62·4	54·6	58·2	+ 0·5	113	0	4	0·27	?	*	*
	Markree Castle	70	44	66·2	51·1	58·2	− 1·3	113	0	7	0·15	−0·65	21	20
	Brookeborough	68	48	64·9	51·6	57·9	− 1·7	111	0	1	0·27	?	*	*
	Armagh	71	46	65·2	51·4	57·9	− 1·6	111	0	3	0·13	−0·50	19	18
	Donaghadee	70	38	64·4	49·6	56·6	− 1·6	102	0	3	0·48	−0·17	*	*
	Edgeworthstown	72	45	66·1	51·9	58·6	− 1·0	116	0	2	0·24	−0·55	*	*
10. IRELAND, S.	Dublin	74	48	67·5	54·6	60·7	+ 1·0	131	0	1	0·05	−0·57	27	25
	Parsonstown	71	43	65·9	53·1	59·1	− 0·2	120	0	3	0·08	−0·67	24	23
	Kilkenny	74	44	67·9	52·2	59·6	− 0·2	123	0	1	0·06	−0·59	*	*
	Waterford	74	45	68·4	53·1	60·3	0·0	128	0	3	0·14	−0·60	*	*
	Roche's Point	73	50	66·7	54·4	60·2	− 0·2	127	0	3	0·23	−0·52	*	*
	Valencia	66	47	63·6	54·6	58·8	− 0·4	118	0	5	0·44	−0·54	21	20
	Killarney	73	43	66·4	52·7	59·2	− 0·4	120	0	3	0·09	?	*	*
	Foynes	66	47	64·2	54·5	59·1	+ 0·1	120	0	3	0·37	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	66	53	64·0	56·4	60·0	− 0·8	126	0	5	0·95	+0·42	*	*
	Jersey (Noirmont)	71	53	67·0	56·4	61·3	− 0·8	135	0	5	0·27	−0·23	47	46

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 33.] *New Series.* WEEK ENDING MONDAY, 16TH AUGUST, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1853-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 132.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	68	35	58·4	46·0	51·8	3 below.	69	0	978	−249	669	+159
	1. SCOTLAND, EAST	68	40	62·6	48·1	54·9	2 below.	90	0	1417	−199	734	+191
	2. ENGLAND, N.E.	71	44	63·7	51·7	57·4	1 below.	108	0	1476	−245	697	+215
	3. ENGLAND, EAST	74	42	66·6	51·6	58·6	3 below.	116	0	1793	−212	750	+243
	4. MIDLAND COUNTIES	74	43	66·2	51·5	58·4	2 below.	115	0	1817	−191	721	+217
	5. ENGLAND, SOUTH	75	45	67·4	54·9	60·8	1 below.	132	0	1978	−175	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	66	44	60·8	50·3	55·2	2 below.	92	0	1373	−324	579	+181
	7. ENGLAND, N.W.§	71	42	63·2	51·9	57·2	2 below.	106	0	1566 *	−234	612	+229
	8. ENGLAND, S.W.	73	43	64·6	52·5	58·2	2 below.	113	0	1829	−214	490	+257
	9. IRELAND, NORTH	71	40	62·5	50·0	55·9	3 below.	97	0	1534	−241	492	+142
	10. IRELAND, SOUTH	71	44	64·0	51·4	57·3	2 below.	107	0	1800	−213	401	+162
	— CHANNEL ISLANDS	67	54	64·2	56·7	60·2	1 below.	127	0	2010	−169	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 132.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	10	3 more.	163	+23	21·2	+ 0·8	29	27	945	+ 50	30	+ 1
	1. SCOTLAND, EAST	5	6	1 less.	129	+10	15·8	+ 0·2	29	27	1007	− 29	33	0
	2. ENGLAND, N.E.	5	9	2 more.	125	+11	17·5	+ 1·4	35	34	824	−135	27	− 4
	3. ENGLAND, EAST	5	7	1 more.	121	+ 5	14·7	− 1·4	42	41	1036	−126	34	− 4
	4. MIDLAND COUNTIES	5	7	1 more.	123	+ 8	20·2 †	+ 2·9	38	37	893	−136	29	− 5
	5. ENGLAND, SOUTH	5	5	0 (average).	114	+ 5	16·4	+ 0·3	44	43	1064	− 41	35	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	10	3 more.	130	+ 1	24·9	+ 1·5	22	21	880	−118	29	− 3
	7. ENGLAND, N.W.§	5	11	4 more.	128	+ 8	24·3	+ 4·4	35	34	900 *	−103‡	29	− 3
	8. ENGLAND, S.W.	4	11	2 more.	128	+ 3	24·1	− 0·8	39	38	1057	−119	35	− 4
	9. IRELAND, NORTH	6	11	4 more.	138	− 6	22·8	+ 1·5	26	25	758	−173	25	− 5
	10. IRELAND, SOUTH	6	13	5 more.	133	− 2	25·0	+ 1·1	40	39	916	−135	30	− 4
	— CHANNEL ISLANDS	6	7	2 more.	146	+12	19·8	+ 1·3	56	55	1296	−112	43	− 4

General Remarks.

Weather has again been cool, changeable, and showery, with heavy thunderstorms over England on the 13th.

Temperature has been uniformly low for the time of year, the deficit from the mean varying from 1° in "England, N.E.", "England, S.", and the "Channel Islands", to 3° in "Scotland, N.", "England, E.", and "Ireland, N." Over Scotland and the greater part of Ireland the daily maxima have been continuously below 70°, but over England the thermometer on the 15th or 16th rose to 73° in "England, S.W.", 74° in "England, E." and the "Midland Counties", and 75° in "England, S." The lowest readings, which were recorded on different dates in the various districts, ranged from 35° in "Scotland, N." (at Wick) to 45° in "England, S." and 54° in the "Channel Islands".

Rainfall has been a little less than the mean in "Scotland, E." and about equal to it in "England, S.", but more in all other districts, the excess being greatest in "Ireland, S."

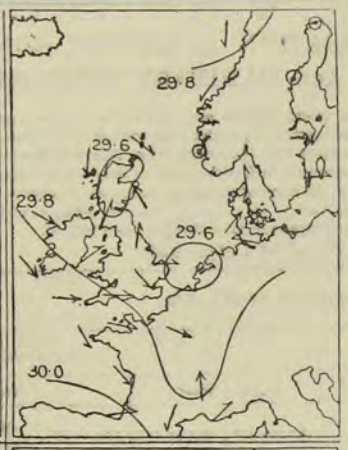
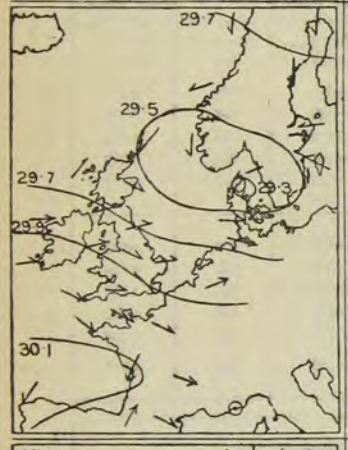
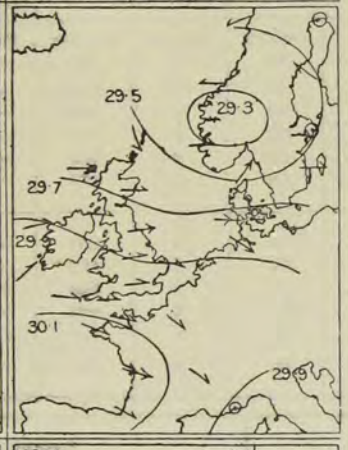
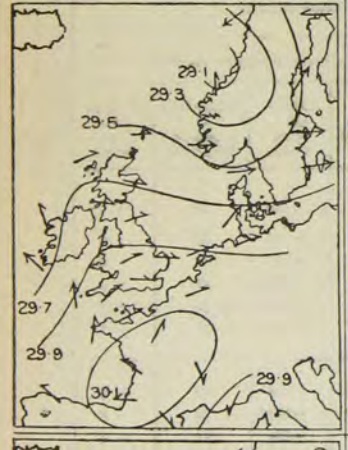
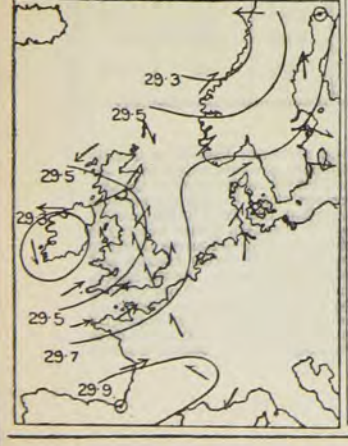
Bright sunshine.—In Ireland and the southern parts of England bright sunshine has been far more prevalent than it was last week, but elsewhere the values have been lower. The percentages of the possible amount of duration have ranged from 21 in "Scotland, W." to 41 in "England, E.", 43 in "England, S.", and 55 in the 'Channel Islands".

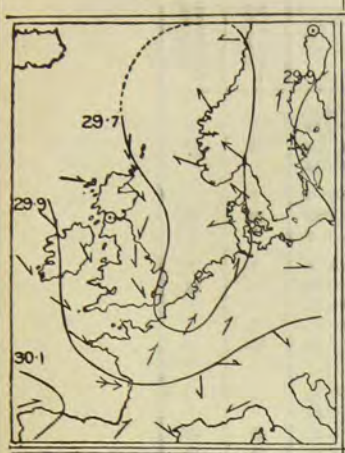
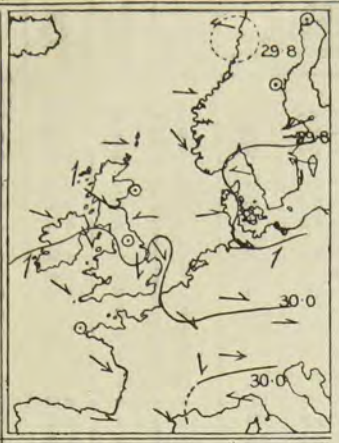
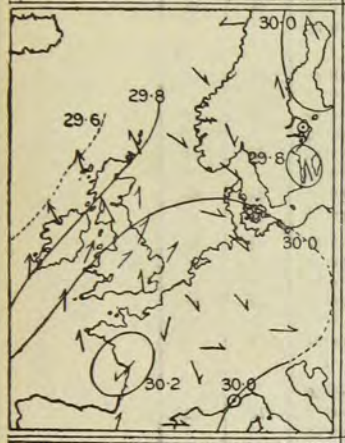
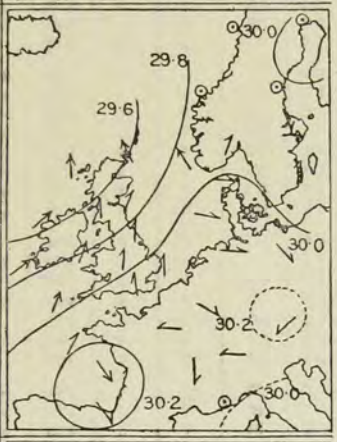
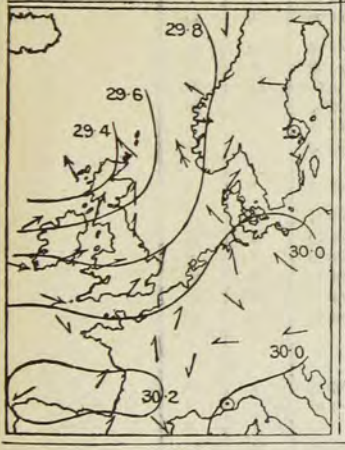
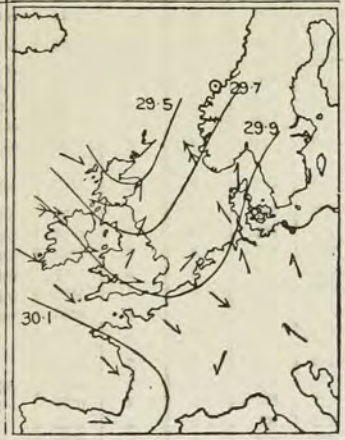
Depressions observed.—During this period the highest pressures have been usually found over Spain and France, while three depressions of importance have appeared on our coasts. The first of these was formed over the English Channel on the night of the 9th, and occasioned a good deal of rain over our south-eastern counties. During the ensuing 48 hours the system gradually became deeper and travelled first in a north-easterly direction to Denmark, and finally in a north-north-westerly direction across Norway to the Atlantic. The second disturbance,—one of diminishing intensity,—advanced slowly to our west coasts on the 12th, and subsequently moved eastwards across Ireland and England to the North Sea and the Baltic, where it apparently dispersed. As the system appeared fresh southerly gales and heavy rain were felt on many parts of our western coasts, while its progress across England was attended by thunderstorms. The third depression advanced to the north-westward of our Islands on the 15th, and subsequently moved eastwards across the north of Scotland. On our western coasts strong winds or gales from South, veering to West and North-West, were experienced, but in the east conditions were not materially affected.

* These values have been altered slightly, owing to the receipt of some arrears of observations from Llandudno.
† This value has been altered slightly, owing to an error in last week's Return from Hereford.
‡ The corresponding value for last week should have read "−100."
§ The accumulated values in this district are liable to alteration, owing to the non-arrival of the Return from Llandudno.

E 23303. 350.—8/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, August 10.** *Weather* rainy over our eastern, midland, and south-eastern counties, but fair or fine in most other localities. Rain setting in on our northern coasts later, but weather improving in south-east. *Temperature* changed somewhat irregularly; readings ranging from 63° at Cambridge to 52° in the Shetlands. *Wind* light from South-West on our north and north-west coasts, but North-Westerly in the south-west of England, South-Easterly in the Netherlands, and Easterly at several of our eastern and south-eastern stations. Subsequently veering to West or North-West on our south-east coasts. *Sea* moderate to smooth. *Barometer* falling at all but the Scandinavian stations. Large area of low readings lying over England and the north of France, with a well-defined depression over the eastern part of the Channel. Depression subsequently moving north-eastwards, but new disturbance advancing over Scotland.	
		**Wednesday, August 11.** *Weather* rainy in the south of Norway and also at several of the Scotch stations, but generally fine elsewhere. Showers falling later in many parts of the Kingdom. *Temperature* fallen in many places; readings ranging from 61° at Dungeness to 49° at Wick. *Wind* light or moderate from between North and East in Scandinavia, but chiefly Westerly elsewhere; fresh in force at several of our more exposed stations. Subsequently backing to South-West on some parts of our western coasts. *Sea* moderate in the west and north-west, but slight or smooth elsewhere. *Barometer* falling in Scandinavia and Scotland, but rising elsewhere. Pressure highest in France, and depressions of previous day lying, one over the north of Denmark and the other off the south-west of Norway. Slight fall setting in at Valencia later.	
		**Thursday, August 12.** *Weather* rainy in the south of Norway and also in the west of our Islands, but fair or fine elsewhere. Rain falling later in all parts of the Kingdom,—heavily in the south of Ireland. *Temperature* fallen a little in Sweden and France, but risen elsewhere; readings over our Islands ranging from 64° at Scilly to 51° at Sumburgh Head and Stornoway. *Wind* fresh or strong from South on our west coasts, but moderate from South-West or West in the other parts of our Islands. Subsequently backing to the Southward generally, and increasing to gale in south-west. *Sea* rough at Valencia, but moderate to smooth elsewhere. *Barometer* falling quickly in Norway and also on our own western coasts, but rising elsewhere. Depression noticed over the north of Denmark on previous day now lying near Christiansund, but fresh disturbance approaching Ireland. Fall taking place later in all parts of our Islands.	
		**Friday, August 13.** *Weather* cloudy and showery in most districts. Severe thunderstorms occurring over England later, with heavy rain locally. *Temperature* risen a little generally; readings over our Islands ranging from 63° at Jersey to 51° at Nairn. *Wind* strong from South-West over the Channel and Bay of Biscay, and moderate from South on our east coasts, but North-Easterly in the north and north-west, and North-Westerly at Valencia. Subsequently backing to North or North-West in Scotland. *Sea* rough off the south-west of England, but moderate to smooth elsewhere. *Barometer* falling at all but the Scandinavian stations. Pressure highest in Spain, with depression off the west of Norway, and new disturbance over the south of Ireland. Latter system moving eastwards later and becoming much shallower.	

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, August 14.** *Weather* rainy in the south of Norway, but fair or fine in most other localities. *Temperature* risen a little on the eastern shores of the North Sea, but fallen elsewhere; readings over our Islands ranging from 62° at Prawle Point, Hurst Castle, and Dungeness to 49° in the Shetlands. *Wind* South-Westerly over the Netherlands, and South-Easterly on the eastern shores of the North Sea, but North-Westerly or Northerly in our Islands; light or moderate in force generally. Subsequently backing to South-West in Ireland and the west of Scotland. *Sea* rough at Scilly, but moderate to smooth elsewhere. *Barometer* rising at all but the German and Danish stations. Pressure highest in Spain with a large shallow area of low pressure (containing the two depressions of the previous day) over the North Sea. Slight fall setting in later in the west of Ireland.	
		**Sunday, August 15.** *Weather* rainy in Ireland, the west of Scotland, and some parts of Scandinavia, but fair or fine elsewhere. Rain extending to our north-east coasts later, but weather improving in Ireland. *Temperature* fallen a little in France, Germany, the Netherlands, and the south of England, but risen elsewhere; readings over our Islands ranging from 62° at Valencia and in London to 51° in the Shetlands. *Wind* South-Westerly or Southerly in our Islands, but Westerly or North-Westerly on the eastern shores of the North Sea, as well as in Germany, and variable in France; strong in force on our extreme western coasts. Subsequently increasing to moderate gale in Ireland and Scotland. *Sea* rough in the west, but moderate to smooth elsewhere. *Barometer* falling briskly in Ireland and Scotland, but rising in most other parts of western Europe. Pressure highest in the west of France, with a large and rather deep depression off our extreme north-west coasts. Fall extending later to all parts of our Islands.	
		**Monday, August 16.** *Weather* squally and showery in our Islands, but fine at many of the Continental stations. *Temperature* risen a little in the north and east, but fallen elsewhere; readings over our Islands ranging from 63° at Cambridge to 53° in the Shetlands. *Wind* strong from the Westward in the west, but moderate from South-West on our eastern coasts, and from South-East on the eastern shores of the North Sea. Subsequently veering to North-West in the west and north-west. *Sea* rough or rather so on all our western coasts, but moderate to smooth elsewhere. *Barometer* falling at all but our extreme western and south-western stations. Pressure highest over the southern part of the Bay of Biscay, with a well marked depression off the north-west of Scotland. Depression subsequently moving eastwards, and barometer rising in west and north.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 129 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	59	46	56·4	46·9	51·4	− 2·6	66	0	4	0·37	−0·33	*	*
	Stornoway	62	41	59·0	45·7	52·0	− 2·8	70	0	5	1·15	+0·35	29	27
	Wick	68	35	59·7	45·3	52·1	− 3·0	71	0	5	1·32	+0·80	*	*
1. SCOTLAND, E.	Nairn	67	40	62·7	47·0	54·4	− 2·4	87	0	6	0·92	+0·30	*	*
	Aberdeen	68	44	63·0	47·4	54·7	− 1·9	89	0	4	0·35	−0·35	29	27
	Leith	65	43	62·1	49·9	55·6	− 2·4	95	0	4	0·41	−0·18	*	*
2. ENGLAND, N.E.	Alnwick Castle	67	47	62·0	51·0	56·2	− 0·4	99	0	4	0·62	−0·06	*	*
	Durham	71	44	66·1	49·7	57·4	+ 0·2	108	0	5	0·42	−0·22	34	33
	Shields	66	46	62·1	51·4	56·4	− 1·1	101	0	5	1·24	+0·62	*	*
	Scarborough ℳ	68	49	64·1	52·3	57·9	− 1·0	111	0	5	1·04	+0·45	*	*
	York	71	49	64·9	51·7	57·9	− 1·9	111	0	6	1·25	+0·70	35	34
	Spurn Head	68	52	63·1	54·1	58·3	− 0·9	114	0	5	0·55	?	*	*
3. ENGLAND, E.	Hillington ℳ	72	45	66·4	50·0	57·7	− 2·4	110	0	5	0·91	+0·33	41	40
	Yarmouth	69	48	65·4	53·7	59·2	− 1·7	120	0	5	0·83	+0·35	*	*
	Geldeston	71	42	66·6	50·5	58·1	− 2·9	113	0	5	0·71	+0·29	43	42
	Cambridge	74	44	68·1	51·3	59·2	− 2·8	120	0	5	0·56	+0·04	41	40
	Rothamsted	69	43	66·4	51·9	58·7	− 2·8	117	0	6	0·69	+0·11	*	*
	Ingatestone	69	46	66·4	51·9	58·7	− 3·5	117	0	4	0·21	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	72	47	65·4	51·7	58·1	− 2·1	113	0	6	0·86	+0·31	30	29
	Loughborough	73	49	67·4	52·9	59·7	− 1·6	124	0	5	0·80	+0·22	*	*
	Leicester	72	48	66·3	52·6	59·0	− 2·3	119	0	5	0·54	−0·10	38	37
	Cheadle ℳ	67	46	63·8	50·2	56·6	− 3·1	102	0	6	0·90	+0·08	*	*
	Churchstoke ℳ	69	43	65·3	48·8	56·6	− 3·1	102	0	5	0·49	−0·11	44	43
	Hereford ℳ	74	46	69·2	51·0	59·6	− 1·6	123	0	3	0·24	−0·33	*	*
	Cirencester	70	43	65·9	51·1	58·1	− 2·7	113	0	5	0·90	+0·15	34	33
	Oxford	70	48	66·3	54·0	59·8	− 1·6	125	0	4	0·70	+0·16	44	43
5. ENGLAND, S.	London†	72	47	63·6	54·7	61·2	− 1·4	134	0	6	0·33	−0·17	44	43
	Strathfield Turgiss ℳ	75	50	71·9	55·6	63·3	+ 2·1	149	0	4	0·55	+0·05	*	*
	Dungeness	68	51	67·0	56·1	61·2	− 0·1	134	0	4	0·37	−0·09	*	*
	Hastings (St. Leonard's)	67	48	65·7	54·9	60·0	− 1·4	126	0	5	0·39	−0·13	48	47
	Southampton	70	47	68·5	53·6	60·6	− 1·2	130	0	5	0·58	0·00	41	40
	Hurst Castle	68	54	66·1	56·7	61·1	− 0·2	134	0	6	0·47	−0·04	*	*
	Stowell ℳ	67	45	63·8	52·6	57·9	− 2·5	111	0	6	0·76	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	66	47	61·2	49·9	55·2	− 1·7	92	0	4	0·61	−0·52	*	*
	Glasgow	63	45	60·4	50·3	55·1	− 2·1	92	0	5	1·02	+0·12	13	12
	Ardrossan	63	48	60·4	50·9	55·4	− 2·1	94	0	5	0·96	+0·05	*	*
	Douglas (Isle of Man)	64	44	61·0	49·9	55·1	− 2·7	92	0	4	1·38	+0·58	31	30
7. ENGLAND, N.W.	Newton Reigny (Penrith)	66	42	62·6	48·7	55·2	− 2·6	92	0	5	0·50	−0·21	32	31
	Barrow-in-Furness	64	51	61·7	53·3	57·3	− 2·7	107	0	5	1·21	+0·41	*	*
	Stonyhurst	66	48	63·0	50·9	56·6	− 2·6	102	0	7	1·02	−0·02	34	33
	Blackpool ℳ	66	44	63·4	51·7	57·2	− 3·2	106	0	4	0·91	+0·23	39	38
	Manchester	71	49	65·2	52·0	58·2	− 1·9	113	0	5	1·86	+1·08	*	*
	Liverpool Obsy (Bidston)	69	51	64·9	53·6	58·9	− 1·6	118	0	6	1·26	+0·63	*	*
	Llandudno ℳ													
	Holyhead	67	50	61·6	53·3	57·2	− 2·4	106	0	5	1·13	+0·48	*	*
8. ENGLAND, S.W.	Llandovery	73	43	67·3	48·4	57·3	− 2·7	107	0	5	1·18	+0·15	*	*
	Pembroke	62	54	60·4	55·3	57·7	− 1·4	110	0	3	0·56	−0·10	45	44
	Arlington (N. Devon)	66	48	63·6	51·7	57·3	− 2·3	107	0	5	1·45	+0·19	*	*
	Cullompton ℳ	70	44	66·7	51·3	58·5	− 2·8	116	0	5	1·33	+0·71	31	30
	Falmouth	66	51	64·3	54·2	59·0	− 1·9	119	0	4	1·22	+0·40	43	43
	Plymouth	69	49	66·1	53·4	59·4	− 2·3	122	0	4	0·89	+0·25	36	36
	Prawle Point	68	50	63·6	53·3	58·1	− 1·4	113	0	3	0·82	?	*	*
9. IRELAND, N.	Malin Head	68	50	61·3	51·4	56·1	− 1·0	99	0	5	0·79	?	*	*
	Londonderry	71	46	64·1	50·1	56·7	− 1·6	103	0	6	0·88	+0·08	*	*
	Mullaghmore	70	49	62·7	52·9	57·5	− 1·7	109	0	7	0·75	−0·02	*	*
	Belmullet	64	51	60·3	53·0	56·4	− 1·4	101	0	6	1·79	?	*	*
	Markree Castle	68	44	62·4	48·6	55·1	− 3·9	92	0	7	1·28	+0·47	25	24
	Brookeborough	67	44	62·4	48·2	54·9	− 4·3	90	0	7	1·33	?	*	*
	Armagh	67	44	65·1	48·5	56·3	− 3·0	100	0	6	1·19	+0·57	26	25
	Donaghadee	64	43	61·0	49·7	55·0	− 2·9	91	0	6	0·69	+0·02	*	*
	Edgeworthstown	68	40	63·3	47·6	55·0	− 4·2	91	0	7	1·17	+0·39	*	*
10. IRELAND, S.	Dublin	70	47	64·8	51·7	57·9	− 1·6	111	0	5	0·63	0·00	40	39
	Parsonstown	71	45	63·7	49·7	56·3	− 2·7	100	0	6	0·80	+0·02	30	29
	Kilkenny	69	44	64·0	49·9	56·5	− 2·9	102	0	5	1·07	+0·37	*	*
	Waterford	67	44	64·0	50·1	56·6	− 3·4	102	0	6	1·72	+0·92	*	*
	Roche's Point	66	50	63·3	52·1	57·4	− 2·7	108	0	7	1·70	+0·92	*	*
	Valencia	65	51	63·7	54·6	58·9	− 0·2	118	0	6	2·08	+1·05	50	49
	Killarney	68	45	64·5	51·9	57·8	− 1·8	111	0	7	1·23	?	*	*
	Foynes	68	49	64·1	50·8	57·1	− 1·6	106	0	7	1·24	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	54	63·4	55·9	59·4	− 1·5	122	0	5	0·69	+0·15	*	*
	Jersey (Noirmont)	67	55	64·9	57·4	60·9	− 1·1	132	0	6	0·75	+0·24	56	55

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 34.] *New Series.* WEEK ENDING MONDAY, 23RD AUGUST, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 136.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	70	36	60·7	47·5	53·7	1 below.	82	0	1060	−250	669	+159
	1. SCOTLAND, EAST	75	39	65·3	49·4	56·9	0 (average).	104	0	1521	−198	734	+191
	2. ENGLAND, N.E.	74	46	63·3	52·5	57·5	0 (average).	109	0	1585	−243	697	+215
	3. ENGLAND, EAST	77	44	67·8	52·2	59·5	1 below.	123	0	1916	−210	750	+243
	4. MIDLAND COUNTIES	77	42	68·4	53·0	60·3	0 (average).	128	0	1945	−178	721	+217
	5. ENGLAND, SOUTH	79	46	69·8	53·4	61·1	0 (average).	134	0	2112	−173	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	68	41	62·1	50·3	55·9	1 below.	97	0	1470	−330	579	+181
	7. ENGLAND, N.W.	72	48	64·3	54·2	58·9	1 below.	118	0	1685	−227	612	+229
	8. ENGLAND, S.W.	79	37	67·1	52·6	59·5	0 (average).	123	0	1952	−215	490	+257
	9. IRELAND, NORTH	75	34	63·9	51·1	57·1	1 below.	106	0	1640	−241	492	+142
	10. IRELAND, SOUTH	71	43	64·3	53·6	58·6	1 below.	115	0	1916	−211	401	+162
	— CHANNEL ISLANDS	68	54	63·6	56·1	59·6	2 below.	123	0	2133	−181	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 136.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	1	6 less.	166	+23	21·3	+ 0·2	36	35	981	+ 58	31	+ 2
	1. SCOTLAND, EAST	2	1	6 less.	131	+ 9	15·9	− 0·3	36	35	1043	− 30	33	0
	2. ENGLAND, N.E.	3	5	1 less.	128	+10	18·0	+ 1·2	18	18	842	−146	27	− 4
	3. ENGLAND, EAST	3	6	1 more.	124	+ 4	15·3	− 1·3	42	42	1078	−121	34	− 4
	4. MIDLAND COUNTIES	2	1	6 less.	125	+ 7	20·3	+ 2·3	29	29	922	−146	29	− 5
	5. ENGLAND, SOUTH	2	3	2 less.	116	+ 3	16·7	+ 0·1	35	35	1099	− 47	35	− 2
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	3	7 less.	134 *	+ 1	25·3 *	+ 1·1	30	30	910	−123	29	− 4
	7. ENGLAND, N.W.	2	1	6 less.	130	+ 7	24·4	+ 3·7	30	30	930	−109	29	− 4
	8. ENGLAND, S.W.	1	less than ½	8 less.	129	0	24·1	− 1·7	35	35	1092	−137	35	− 4
	9. IRELAND, NORTH	4	4	4 less.	142	− 6	23·2	+ 1·1	22	22	780	−181	25	− 5
	10. IRELAND, SOUTH	4	8	0 (average).	137	− 1	25·8	+ 1·1	14	14	930	−161	30	− 5
	— CHANNEL ISLANDS	4	3	3 less.	150	+12	20·1	+ 1·0	43	44	1339	−127	43	− 4

General Remarks.

Weather has varied considerably in different parts of the Kingdom. In Ireland and the north and north-west of England it was very cloudy or dull, while in Scotland and the south and south-east of England the conditions were generally fair.

Temperature has been a little below or about equal to its normal value. The highest of the maxima, which were recorded during the last few days of the period, varied from 68° in "Scotland, W." and the "Channel Islands", to 77° in "England, E." and the "Midland Counties", and to 79° in the south and south-west of England. The lowest of the minima, which were registered on irregular dates, ranged from 34° in "Ireland, N.", and 36° in "Scotland, N.", to 48° in "England, N.W." and 54° in the "Channel Islands".

Rainfall has been slightly more than the mean in "England, E.", and about equal to it in "Ireland, S.", but less in all other districts. In the north and east of Scotland, and the western and central parts of England, the amount has been very trifling.

Bright sunshine has been rather less prevalent than it was last week, the percentages of the possible amount of duration varying from 14 in "Ireland, S.", and 18 in "England, N.E.", to 42 in "England, E.", and 44 in the "Channel Islands".

Depressions observed.—The distribution of barometric pressure over our area has been somewhat irregular. Some rather large depressions have been observed off our extreme northern coasts and over Scandinavia, and others over the Mediterranean, while in our immediate neighbourhood several small, shallow disturbances have appeared—chiefly over the North Sea, our south-eastern coasts, the Netherlands, and the north of France. Over our western coasts pressure has been relatively high. In Ireland and the west of England the wind has been generally light or moderate from between North and West, but in all other parts of the Kingdom it has been light and very variable.

* These values have been altered, owing to some errors in recent returns from Douglas.

E 23371. 350.—8/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Tuesday, August 17.

Weather cloudy and unsettled in most districts, with rain in eastern France, drizzle at Wick, and passing showers at Aberdeen and Spurn Head. Rain falling later in the south of Ireland, and thunderstorms occurring over the east of England.

Temperature risen a little in Sweden, Denmark, and Germany, but fallen elsewhere; readings over our Islands ranging from 59° at Jersey, Dungeness, and over central England to 51° at Wick.

Wind light from South or South-East on the eastern shores of the North Sea, but North-Westerly over the United Kingdom and France, strong in force on our north-west coasts. Subsequently backing to West in Ireland and the west of Scotland.

Sea rough or rather so on our west and south-west coasts, but moderate to smooth elsewhere.

Barometer rising in our Islands and France, but falling in Scandinavia, Denmark, and Germany. Pressure highest over the Bay of Biscay, with a depression off the west of Norway, and a subsidiary "hollow" over the North Sea. Slight fall taking place on our west coasts later.

Wednesday, August 18.

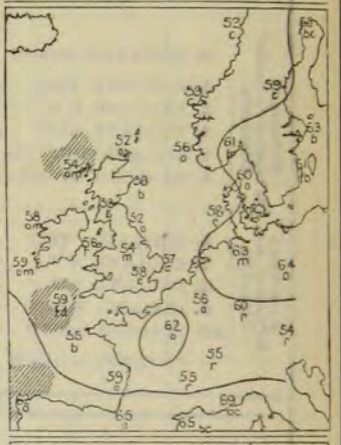
Weather rainy at several of our north-western stations and also in Germany and the east of France, but fair or fine elsewhere. Rain falling later in many parts of the United Kingdom.

Temperature risen a little on our western and northern coasts, but fallen at our eastern and many of the Continental stations; readings over our Islands ranging from 59° at Valencia and Scilly to 52° at Sumburgh Head and Shields.

Wind Northerly over the North Sea, the east and south of England, and the greater part of France, but South-Westerly on our north and north-west coasts, light or moderate in force generally. Subsequently backing to the Westward in the south of England.

Sea rather rough at Stornoway and Scilly, but slight or smooth elsewhere.

Barometer falling a little on our extreme north-west coasts, but rising elsewhere. Anticyclone with readings above 30·2 ins. lying over the Bay of Biscay and the southern parts of our Islands, with relatively low pressures to the north-westward of Scotland and the south-eastward of France. Fall taking place later at all our more northern stations.



Thursday, August 19.

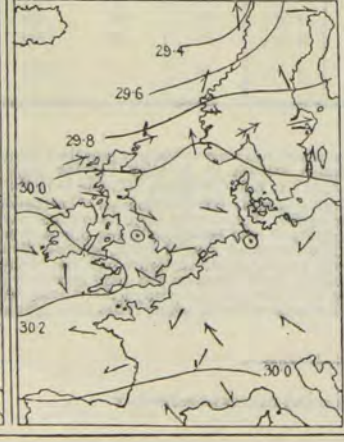
Weather fine at most of the Continental stations, but cloudy in our Islands, with rain in the east and south-east of England. Improvement taking place in east of England later.

Temperature fallen a little in Denmark and the north of Ireland, but risen in most other localities; readings over our Islands ranging from 62° at Hurst Castle to 53° in the Shetlands.

Wind light from West and North-West over the greater part of our Islands, but Northerly or North-Easterly in France and Southerly or South-Easterly in Norway. Subsequently backing to South in Scotland.

Sea moderate at Sumburgh Head and Scilly, but slight or smooth elsewhere.

Barometer falling a little on our eastern and southern coasts, but rising in most other localities. Anticyclone lying over the Bay of Biscay and our south-west coasts, with a depression off the north-west of Norway, and a subsidiary hollow over the North Sea. Shallow depression forming over the south-east of England, and subsequently moving southwards to France.



Friday, August 20.

Weather fair in most places, but drizzling rain reported at Stornoway and fog over the north of England. Fog clearing later.

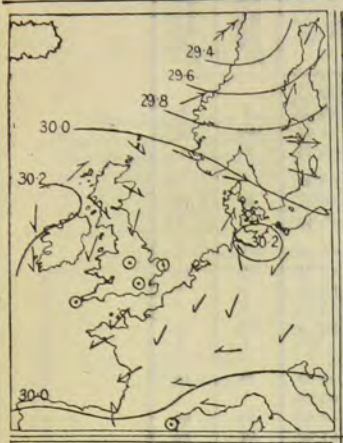
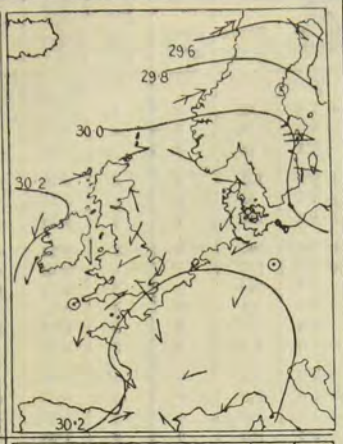
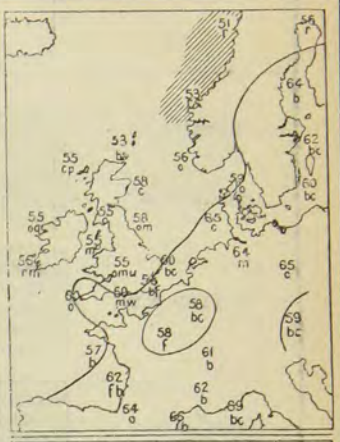
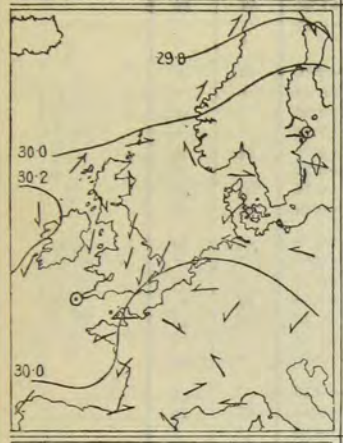
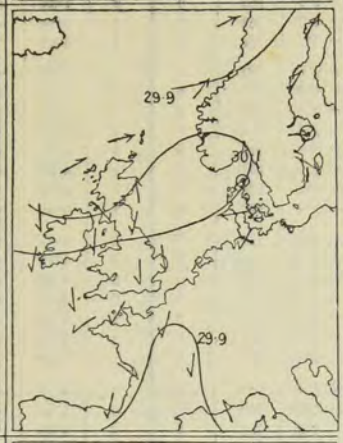
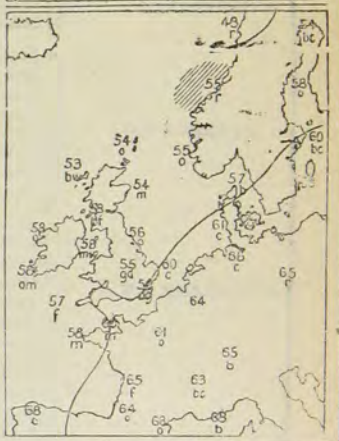
Temperature fallen a little at the English stations and also in Sweden, but risen elsewhere; readings over our Islands ranging from 65° at Nairn and Aberdeen, 63° at Dungeness, and 62° at Roche's Point to 52° at York.

Wind moderate to strong from South-West in Scotland and the north of Ireland, but light from North-East on our southern coasts and moderate from North-West in the west of France. Subsequently veering to the westward in the north of our Islands.

Sea rough at Stornoway, but moderate to smooth elsewhere.

Barometer falling on our northern coasts and also over France, but rising in most other localities. Anticyclonic band with readings above 30·2 ins. lying over Ireland, England, and the Netherlands. Large depression off the north-west of Scotland. Fall taking place generally later.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, August 21.** *Weather* rainy at several of our western stations, and also in some parts of Scandinavia, but fair or fine elsewhere. *Temperature* fallen several degrees on our western and northern coasts, and also in the west of France; readings over our Islands ranging from 65° at Prawle Point to 53° at Sumburgh Head and Nairn, and 51° at Oxford. Subsequently rising to 74° in London, 75° at Loughborough, and 76° at Cambridge. *Wind* Westerly or South-Westerly in Scandinavia and the north of Scotland, but North-Easterly over France and the Channel, and Northerly in Ireland. Light or moderate in force in most places. *Sea* rather rough off the west of Norway, but slight or smooth elsewhere. *Barometer* falling at all but our northern and extreme north-western stations. Anticyclonic band lying over the United Kingdom, the Netherlands, Germany, and the north of France, with a large and rather deep depression over the north of Scandinavia, and a small shallow disturbance at the mouth of the St. George's Channel. Small system subsequently moving eastwards over England.	
		**Sunday, August 22.** *Weather* dull and misty at several of the English stations, with rain at Shields, but fair or fine elsewhere. Sky clearing somewhat over England later. *Temperature* risen a little over the greater part of France and Germany, but fallen elsewhere, readings over our Islands varying from 62° at Prawle Point and Yarmouth, to 47° at Parsonstown. *Wind* moderate South Westerly on our northern coasts, but Northerly or North-Easterly in most other parts of western Europe. *Sea* moderate to smooth. *Barometer* rising over the greater part of our Islands, and also in Scandinavia, but falling elsewhere. Pressure highest off the west of Ireland, but long band of relatively high readings extending eastwards over England, the North Sea, and the south of Sweden, with irregularly formed area of low pressure over France. Fall taking place generally later.	
		Monday, August 23. *Weather* cloudy in most places, with mist or fog in many parts of our Islands, as well as in the west of France. Heavy thunderstorms occurring in France later, and rain falling in the extreme south of England. *Temperature* changed little and irregularly; readings ranging from 62° at Prawle Point to 49° at Nairn. Subsequently rising to 74° at Cambridge and 78° in London. *Wind* light from South-East or South on our western and northern coasts, but Northerly or North-Easterly at our eastern, southern, and many of the continental stations. *Sea* smooth or nearly so, except at Scilly. *Barometer* rising a little at most of the French and Scandinavian stations, but falling elsewhere. Pressure highest over the south of Norway, with shallow depressions over France, and also to the westward of our Islands. Fall taking place generally later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 133 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	59	46	57·3	48·6	52·7	− 1·2	75	0	3	0·18	−0·57	*	*
	Stornoway	62	42	60·7	47·4	53·7	− 0·9	82	0	4	0·15	−0·67	36	35
	Wick	70	36	64·1	46·4	54·7	− 0·1	89	0	3	0·09	−0·44	*	*
1. SCOTLAND, E.	Nairn	71	40	66·6	48·0	56·7	+ 0·5	103	0	2	0·02	−0·61	*	*
	Aberdeen	75	39	64·4	48·6	56·0	+ 0·1	98	0	2	0·12	−0·61	36	35
	Leith	71	48	64·9	51·7	57·9	+ 0·3	111	0	3	0·03	−0·55	*	*
2. ENGLAND, N.E.	Alnwick Castle	69	46	61·7	52·0	56·6	+ 0·5	102	0	3	0·28	−0·40	*	*
	Durham	74	46	64·7	51·7	57·8	+ 1·1	111	0	5	0·43	−0·21	21	21
	Shields	74	48	62·7	52·4	56·9	0·0	104	0	3	0·78	+0·16	*	*
	Scarborough ℳ	69	49	62·5	53·4	57·7	− 0·5	110	0	2	0·52	−0·08	*	*
	York	71	50	66·3	52·3	58·9	0·0	118	0	3	0·73	+0·18	15	15
	Spurn Head	64	51	61·7	53·4	57·0	− 2·0	105	0	3	0·50	?	*	*
3. ENGLAND, E.	Hillington ℳ	73	44	68·2	51·6	59·4	− 0·4	122	0	2	0·38	−0·20	40	40
	Yarmouth	67	51	64·6	54·3	59·1	− 1·4	120	0	3	0·68	+0·19	*	*
	Geldeston	72	48	68·0	52·5	59·8	− 0·8	125	0	3	0·34	−0·08	53	54
	Cambridge	76	46	69·9	51·1	59·9	− 1·5	125	0	3	1·58	+1·06	33	33
	Rothamsted	72	46	67·7	52·0	59·4	− 1·5	122	0	3	0·12	−0·46	*	*
	Ingatestone	77	48	68·2	51·4	59·3	− 2·2	121	0	3	0·48	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	73	48	67·9	53·7	60·4	+ 0·6	129	0	4	0·35	−0·21	15	15
	Loughborough	76	50	69·6	53·7	61·2	+ 0·6	134	0	3	0·12	−0·48	*	*
	Leicester	74	50	68·7	53·4	60·6	− 0·1	130	0	4	0·13	−0·52	17	17
	Cheadle ℳ	69	46	65·2	52·4	58·4	− 1·0	115	0	1	0·05	−0·79	*	*
	Churchstoke ℳ	73	42	68·3	50·2	58·7	− 0·6	117	0	1	0·01	−0·61	34	34
	Hereford ℳ	77	51	72·8	56·1	64·0	+ 3·4	154	0	1	0·03	−0·56	*	*
	Circncester	72	45	67·7	52·0	59·4	− 1·1	122	0	1	0·02	−0·73	?48	?48
	Oxford	72	48	67·3	52·6	59·5	− 1·8	123	0	2	0·04	−0·49	33	33
5. ENGLAND, S.	London†	78	48	71·3	53·0	61·6	− 0·6	137	0	2	0·07	−0·43	28	28
	Strathfield Turgiss ℳ	76	53	71·7	55·1	62·9	+ 1·8	146	0	2	0·17	−0·33	*	*
	Dungeness	72	52	66·7	54·1	60·0	− 1·2	126	0	3	0·63	+0·14	*	*
	Hastings (St. Leonard's)	75	52	67·3	54·3	60·4	− 0·9	129	0	3	0·72	+0·16	37	37
	Southampton	79	49	73·4	52·5	62·3	+ 0·7	142	0	2	0·42	−0·18	40	40
	Hurst Castle	76	48	70·6	53·0	61·3	+ 0·1	135	0	2	0·18	−0·37	*	*
	Stowell ℳ	71	46	67·7	51·8	59·3	− 0·8	121	0	1	0·01	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	64	41	61·2	48·1	54·3	− 2·3	86	0	5	0·75	−0·35	*	*
	Glasgow	66	48	63·1	50·2	56·8	− 0·2	100	0	2	0·03	−0·84	28	27
	Ardrossan	68	47	62·1	51·7	56·6	− 0·5	102	0	2	0·03	−0·89	*	*
	Douglas (Isle of Man)	65	47	61·9	?51·2	?56·2	−?1·4	?99	0	4	0·37	−0·47	32	32
7. ENGLAND, N.W.	Newton Reigny (Penrith)	71	48	64·6	51·8	57·8	+ 0·6	111	0	3	0·17	−0·56	29	29
	Barrow-in-Furness	68	53	62·6	55·7	58·9	− 0·9	118	0	3	0·11	−0·72	*	*
	Stonyhurst	68	51	64·7	54·3	59·9	+ 0·2	120	0	2	0·13	−0·92	22	22
	Blackpool ℳ	70	50	64·9	54·9	59·6	− 0·5	123	0	1	0·04	−0·63	34	34
	Manchester	72	49	66·0	54·5	59·9	+ 0·2	125	0	2	0·07	−0·70	*	*
	Liverpool Obsy (Bidston)	71	52	65·6	55·7	60·3	+ 0·3	128	0	2	0·13	−0·51	*	*
	Llandudno ℳ	69	49	63·8	53·5	58·3	− 1·9	114	0	2	0·25	−0·35	34	34
	Holyhead	67	50	62·3	53·3	57·5	− 2·0	109	0	1	0·05	−0·62	*	*
8. ENGLAND, S.W.	Llandovery	79	37	71·0	48·1	58·9	− 0·5	118	0	2	0·06	−1·03	*	*
	Pembroke	66	52	63·0	55·3	58·9	+ 0·2	118	0	3	0·07	−0·69	31	31
	Arlington (N. Devon)	74	44	66·6	50·9	58·3	− 0·7	114	0	1	0·03	−1·23	*	*
	Cullompton ℳ	74	42	69·9	51·5	60·2	− 0·5	127	0	2	0·02	−0·64	33	33
	Falmouth	67	53	65·0	54·8	59·6	− 1·1	123	0	0	—	−0·86	36	37
	Plymouth	72	46	68·2	53·5	60·4	− 1·3	129	0	0	—	−0·66	38	39
	Prawle Point	70	49	66·3	54·3	59·9	+ 0·9	125	0	0	—	?	*	*
9. IRELAND, N.	Malin Head	65	50	61·6	53·4	57·3	+ 0·5	107	0	4	0·18	?	*	*
	Londonderry	75	42	68·4	50·1	58·7	+ 1·0	117	0	3	0·11	−0·72	*	*
	Mullaghmore	66	51	62·0	54·0	57·8	− 0·9	111	0	4	0·29	−0·48	*	*
	Belmullet	65	46	60·9	52·4	56·4	− 1·2	101	0	5	0·30	?	*	*
	Markree Castle	67	34	63·3	48·8	55·6	− 2·7	95	0	5	0·35	−0·47	14	14
	Brookeborough	72	36	66·4	48·2	56·8	− 1·7	104	0	3	0·32	?	*	*
	Armagh	70	42	66·0	50·9	58·0	− 0·6	112	0	3	0·52	−0·11	30	30
	Donaghadee	72	48	62·6	51·3	56·6	− 0·9	102	0	4	0·45	−0·24	*	*
	Edgeworthstown	69	42	63·9	51·0	57·1	− 1·4	106	0	4	0·62	−0·15	*	*
10. IRELAND, S.	Dublin	69	50	65·4	53·9	59·4	+ 0·3	122	0	4	0·67	+0·03	11	11
	Parsonstown	68	43	62·9	52·0	57·1	− 1·7	106	0	4	0·47	−0·33	15	15
	Kilkenny	70	49	65·6	54·3	59·6	+ 1·0	123	0	4	0·78	+0·03	*	*
	Waterford	71	50	68·0	54·2	60·7	+ 1·3	131	0	3	0·74	0·00	*	*
	Roche's Point	70	50	64·1	53·9	58·7	− 1·2	117	0	2	0·98	+0·13	*	*
	Valencia	66	51	62·1	54·3	58·0	− 0·9	112	0	6	1·22	+0·16	17	17
	Killarney	70	44	65·0	52·4	58·3	− 1·2	114	0	5	0·83	?	*	*
	Foynes	65	47	61·5	53·4	57·2	− 1·2	106	0	5	0·96	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	55	62·7	56·3	59·3	− 1·5	121	0	4	0·06	−0·50	*	*
	Jersey (Noirmont)	68	54	64·4	55·9	59·9	− 1·9	125	0	3	0·53	+0·01	43	44

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 35.] *New Series.* WEEK ENDING MONDAY, 30TH AUGUST, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 140.)	Temperature of the Air.											
		Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
				Averages of				For the Week.		Since December 29, 1885.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	73	44	61·2	49·8	55·1	1 above.	92	0	1152	−230	669	+159
	1. SCOTLAND, EAST	75	44	67·9	52·9	60·0	4 above.	126	0	1647	−158	734	+191
	2. ENGLAND, N.E.	80	46	70·4	54·2	61·8	5 above.	139	0	1724	−204	697	+215
	3. ENGLAND, EAST	86	42	75·0	53·2	63·5	4 above.	151	0	2067	−171	750	+243
	4. MIDLAND COUNTIES	86	45	74·9	53·5	63·6	4 above.	151	0	2096	−132	721	+217
	5. ENGLAND, SOUTH	87	47	73·6	56·0	64·3	4 above.	156	0	2268	−139	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	69	45	62·7	53·7	58·0	2 above.	112	0	1582	−311	579	+181
	7. ENGLAND, N.W.	78	45	68·0	55·4	61·3	3 above.	135	0	1820	−192	612	+229
	8. ENGLAND, S.W.	81	43	69·0	55·5	61·8	3 above.	139	0	2091	−190	490	+257
	9. IRELAND, NORTH*	73	46	65·4	53·8	59·3	2 above.	121	0	1761	−216	492	+142
	10. IRELAND, SOUTH*	76	46	66·4	55·9	60·9	2 above.	132	0	2048	−185	401	+162
	— CHANNEL ISLANDS*	77	57	68·9	58·6	63·4	2 above.	150	0	2283	−157	202	+109

	DISTRICTS. (See p. 140.)	Rainfall.						Bright Sunshine.					
		For the Week.			Since December 29, 1885.			For the Week.		Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	0 (average).	171	+24	22·0	+ 0·2	13	13	994	+ 40	30	+ 2
	1. SCOTLAND, EAST	2	1	6 less.	133	+ 6	16·0	− 0·9	37	37	1080	− 23	33	0
	2. ENGLAND, N.E.	0	−	6 less.	128	+ 6	18·0	+ 0·6	40	41	882	−122	27	− 4
	3. ENGLAND, EAST	0	−	6 less.	124	0	15·3	− 1·9	56	59	1134	− 88	35	− 3
	4. MIDLAND COUNTIES	1	less than ½	6 less.	126	+ 4	20·3	+ 1·7	41	42	963	−125	30	− 4
	5. ENGLAND, SOUTH	0	−	6 less.	116	− 1	16·7	− 0·5	50	52	1149	− 24	36	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	7	6 less.	139	+ 3	26·0	+ 0·9	21	22	931	−124	29	− 3
	7. ENGLAND, N.W.	2	1	7 less.	132	+ 6	24·5	+ 3·1	31	31	961	− 95	30	− 2
	8. ENGLAND, S.W.	1	1	7 less.	130	− 3	24·2	− 2·4	35	37	1127	−132	35	− 4
	9. IRELAND, NORTH*	6	9	1 more.	148	− 5	24·1	+ 0·3	20	21	800	−180	25	− 5
	10. IRELAND, SOUTH*	3	5	4 less.	140	− 2	26·3	+ 0·8	19	20	949	−168	29	− 5
	— CHANNEL ISLANDS*	3	2	3 less.	153	+10	20·3	+ 0·6	47	49	1386	−110	43	− 4

General Remarks.

Weather has been fine, warm, and dry over the greater part of the Kingdom, but on our extreme north and west coasts it has been less settled, with cloudy or overcast skies and rather frequent falls of rain. At the southern English stations thick morning fogs have occasionally prevailed.

Temperature has been higher than that reported for many weeks past; in "England, E." and "England, S." it has been higher than during any previous week this summer. The weekly average has been above the mean value in all districts, the excess ranging from 1° in "Scotland, E." and 2° over Ireland, "Scotland, W.", and the "Channel Islands", to 4° or 5° over all the southern, central, and eastern parts of England and the east of Scotland. The highest of the maxima were registered on the 30th, and ranged from 69° to 75° in Scotland, and from 73° to 76° in Ireland, while over England they varied from 78° in "England, N.W." to 86° in "England, E." and the "Midland Counties", and 87° in "England, S." The lowest of the minima, which were recorded on irregular dates, ranged from 42° in "England, E.", to 47° in "England, S.", and to 57° in the "Channel Islands".

Rainfall has been a little more than the mean in "Ireland, N." and about equal to the mean value in "Scotland, N.", but less in all other districts. Over the greater part of England rain has been almost entirely absent, but exceptionally heavy dews have fallen.

Bright sunshine shows a decrease over Ireland and Scotland, but a decided increase over England. The percentages of the possible amount of duration varied between 13 and 22 in Ireland and the west and north of Scotland, to 52 in "England, S." and 59 in "England, E."

Depressions observed.—At the commencement of the period a large shallow depression lay at some distance to the westward of Scotland and an extensive area of low pressure over France and Germany, while the barometer was relatively high over Scandinavia and Spain. By the 25th, however, an anticyclone had appeared over the Bay of Biscay from the south-westward, the barometer over Scandinavia had fallen considerably, and other disturbances were moving in a north-easterly direction outside our western and northern coasts. During the remainder of the period the anticyclone moved eastwards, at the same time growing larger, and depressions continued to skirt our extreme western and north-western coasts. On the evening of the 26th, a small well-defined disturbance passed from west to east over Scotland, while some local irregularities in pressure were observed further to the southward. Moderate to fresh breezes from between South and West were most general over our Islands, but during the morning of the 28th a Southerly gale prevailed on the extreme west coast of Ireland.

* The accumulated values in these districts are liable to alteration owing to the non-arrival of the Returns from Brookeborough, Foynes, and Scilly.

E 23416. 350.—9/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Tuesday, August 24.

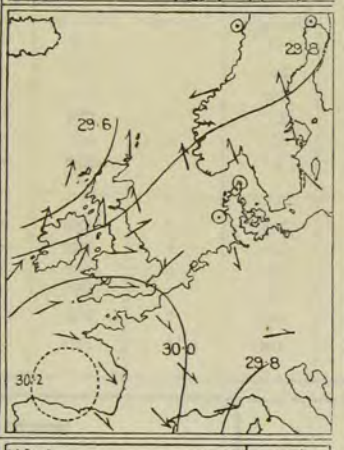
Weather fine in Sweden, Denmark, Scotland, and the south-west of England, but cloudy elsewhere, with mist or fog in many places, showers at Stornoway and Valencia, and rain at Dungeness, Cape Gris Nez, and Brussels. Slight rain falling on our north-west coasts later.

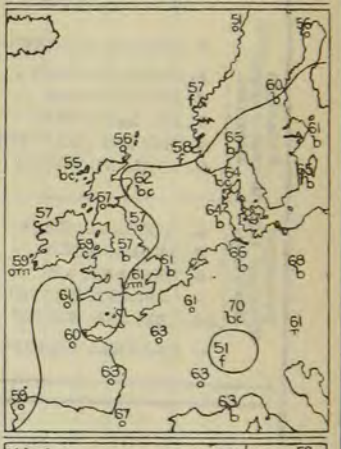
Temperature fallen slightly in the east of England, but risen elsewhere; readings ranging from 65° at Prawle Point to 51° at Shields. Subsequently rising to 77° at Hurst Castle and in London, 78° at Loughborough and Cambridge, and 79° at York.

Wind light or moderate from South-West or South in Ireland and Scotland, but Easterly on the eastern shores of the North Sea, Northerly in the east and south of our Islands, and North-Westerly in the west of France.

Sea rather rough at Stornoway, but slight or smooth elsewhere.

Barometer rising in Sweden, France, and the south-west of our Islands, but falling elsewhere. Pressure high in Sweden and Spain, with a depression off our extreme north-west coasts, and a large area of relatively low readings over Germany and France.





Wednesday, August 25.

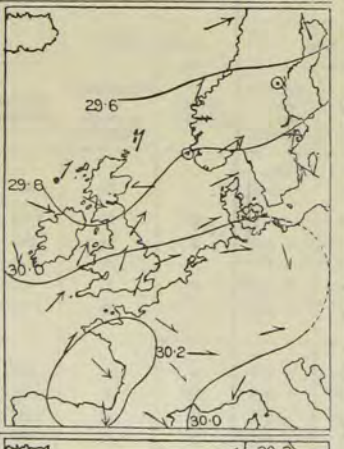
Weather dull in the west of our Islands and the south of France, and foggy in the west of Norway, but fair or fine elsewhere. Rain falling later on our extreme north and north-west coasts.

Temperature fallen a little in the north of Scotland, the south of England, and the west of France, but risen elsewhere; readings over our Islands ranging from 62° at Aberdeen and 61° in the south-east of England to 55° at Stornoway. Subsequently rising to 75° in London and at Cambridge.

Wind moderate South-Westerly on our western and northern coasts, but North-Westerly over the south of our Islands and the greater part of France. Subsequently backing to West on our southern coasts.

Sea moderate to smooth.

Barometer rising over England and France, but falling elsewhere. Pressure highest over Spain and the Bay of Biscay, with some larger depressions to the north-westward and northward of our Islands, and a smaller disturbance over North Germany. Rise extending to Germany later.



Thursday, August 26.

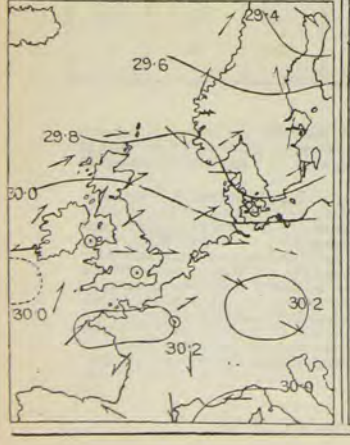
Weather rainy in Ireland and the west of Norway, but fair or fine elsewhere. Rain falling later at most of our western and northern stations.

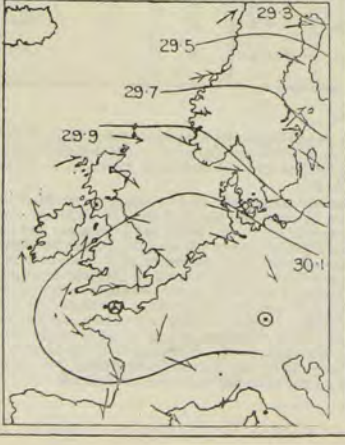
Temperature fallen at our northern and some of the French stations, but risen elsewhere; readings over our Islands ranging from 64° at Scilly and in London to 51° at Stornoway. Highest maximum over England 75° in London and at Cambridge.

Wind moderate or fresh South-Westerly over the greater part of Western Europe, but North-Westerly in Germany and the east of France. Subsequently veering to North-West in the west of Ireland.

Sea rough at Valencia, but moderate to smooth elsewhere.

Barometer falling in Scandinavia and also in the west and north of our Islands, but rising elsewhere. Anticyclone lying over France, the Bay of Biscay, and our southern coasts, with depressions to the north-westward and northward of our Islands. Rise taking place in west and north later.





Friday, August 27.

Weather dull in the south of our Islands, and foggy at all our south-western stations, but fair or fine elsewhere. Rain falling later in the west generally.

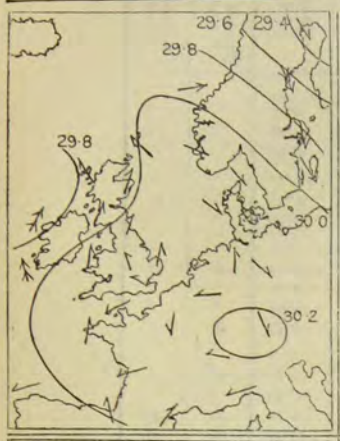
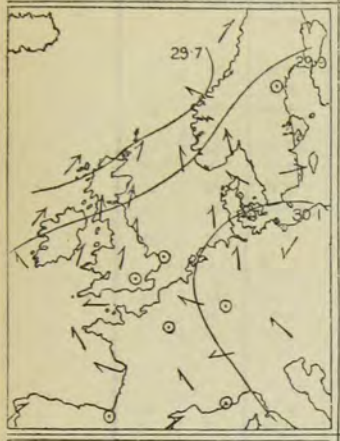
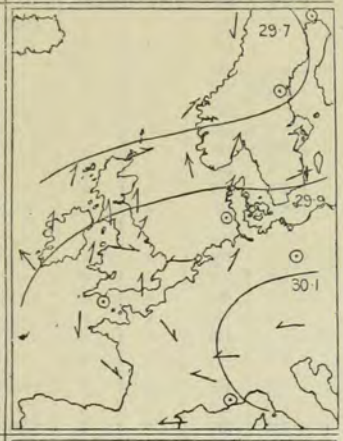
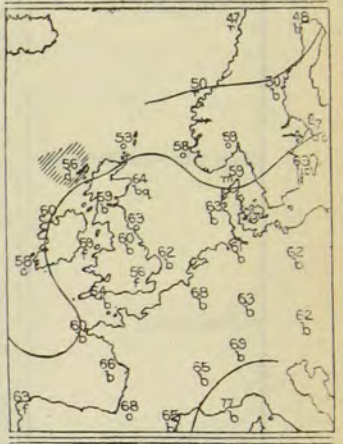
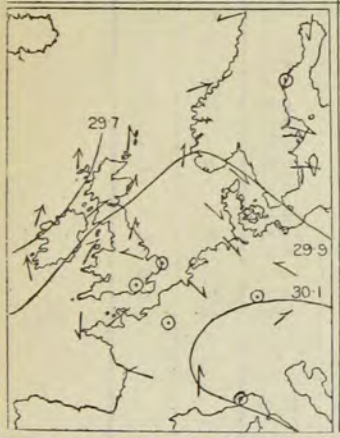
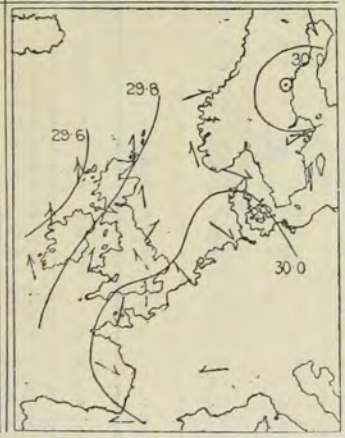
Temperature fallen in Scandinavia and also over the northern parts of England and Ireland, but risen elsewhere; readings over our Islands ranging from 66° at Loughborough and Cambridge to 53° in the Shetlands and Hebrides, and 52° at Shields. Subsequently rising to 77° at Oxford, Cambridge, and in London.

Wind light or moderate from South-West or West over the greater part of Western Europe, but North-Westerly in Germany and North-Easterly or Easterly in France. Subsequently backing to the Southward on our west coasts.

Sea moderate to smooth.

Barometer rising at all but the Scandinavian stations. Anticyclone lying over England, France, and Germany, with a depression over the north of Sweden, and a very shallow disturbance off the south of Ireland. Fall taking place later, in west and south.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, August 28.** *Weather* rather showery in Ireland and in the western parts of Scotland and Norway, fine elsewhere, and warm. *Temperature* rising, and reaching 75° to 79° over England during the day, but not exceeding 66° in Ireland and 69° at Aberdeen. *Wind* Southerly ; a strong gale in the west of Ireland, and a moderate to fresh breeze on the shores of the Irish Channel, but remaining light and variable (from between South-East and South) over England, light Easterly breezes felt in the Bay of Biscay, and strong North-Westerly winds over Scandinavia. *Sea* very rough in the far west. *Barometer* high over Germany, France, and North Sea, low in west. Large depression over Atlantic, far to the westward of Ireland, moving northwards.	
		**Sunday, August 29.** *Weather* fine except in extreme west and north-west, where some showers fell ; foggy over Irish Sea. *Temperature* still inclined to rise, especially over England. Maximum readings recorded during day being 80° in London, 78° at Loughborough, and 75° at Leith. *Wind* calm over England, but veered to South-West in Ireland and Scotland, with decreasing force in the west—though still strong in several places. Strong South-Easterly breeze at Valencia in evening. *Sea* rough in the Minch, moderate on our western coasts, slight or smooth elsewhere. *Barometer* still highest over Germany, France, and England, lowest in north-west and west. Yesterday's depression in far west passing away to northward ; new one approaching Valencia later.	
		**Monday, August 30.** *Weather* becoming squally and showery again in extreme west and north, but remaining very fine over England and the Continent. *Temperature* very high except in west and north ; the maximum temperatures exceeding 90° in south-west of France, and rising to 87° in London, 86° at Oxford and Loughborough, 80° at York, and 73° at Wick. Succeeding night cool. *Wind* Southerly ; strong in west and north, light to moderate over England, and fresh during afternoon. *Sea* smooth except in extreme north-west and west. *Barometer* remaining high on Continent, the south of England, and the North Sea ; low in north-west ; depression moving northwards outside our extreme western coasts, and a very shallow subsidiary passing northwards over England.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 137 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	61	45	58·6	48·7	53·4	− 0·3	80	0	5	0·43	−0·32	*	*
	Stornoway	63	44	59·6	49·9	54·3	+ 0·6	86	0	7	1·33	+0·49	13	13
	Wick	73	46	65·3	50·9	57·7	+ 3·5	110	0	3	0·38	−0·18	*	*
1. SCOTLAND, E.	Nairn	70	49	66·6	52·9	59·3	+ 4·0	121	0	4	0·09	−0·54	*	*
	Aberdeen	72	44	67·1	52·3	59·3	+ 4·0	121	0	2	0·15	−0·58	37	37
	Leith	75	49	70·1	53·4	61·3	+ 4·4	135	0	1	0·03	−0·55	*	*
2. ENGLAND, N.E.	Alnwick Castle	72	52	67·7	54·9	60·9	+ 5·3	132	0	1	0·02	−0·68	*	*
	Durham	77	46	71·3	51·9	61·0	+ 4·9	133	0	0	—	−0·62	40	41
	Shields	77	48	70·0	51·9	60·4	+ 4·1	129	0	1	0·01	−0·60	*	*
	Scarborough ℳ	78	51	71·4	55·1	62·3	+ 5·3	146	0	0	—	−0·60	*	*
	York	80	52	74·1	54·6	63·8	+ 5·9	153	0	0	—	−0·57	40	41
	Spurn Head	73	54	67·7	53·6	61 8	+ 3·7	139	0	0	—	?	*	*
3. ENGLAND, E.	Hillington ℳ	84	49	76·2	52·8	63·8	+ 4·9	153	0	0	—	−0·60	53	55
	Yarmouth	74	50	68·4	55·3	61·5	+ 1·5	137	0	0	—	−0·62	*	*
	Geldeston	82	47	75·6	52·9	63·6	+ 3·8	151	0	0	—	−0·46	61	64
	Cambridge	86	49	77·9	53·3	64·9	+ 4·5	160	0	0	—	−0·53	55	57
	Rothamsted	84	42	76·0	51·9	63·5	+ 3·6	151	0	0	0·01‖	−0·59	*	*
	Ingatestone	82	48	76·0	53·0	63·8	+ 3·2	153	0	0	—	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	84	50	76·9	53·4	64·5	+ 5·5	158	0	0	—	−0·58	39	40
	Loughborough	86	48	76·0	54·9	64·8	+ 5·3	160	0	1	0·05	−0·58	*	*
	Leicester	86	48	75·6	54·6	64·5	+ 5·0	158	0	1	0·01	−0·64	43	44
	Cheadle ℳ	78	49	71·3	53·3	61·8	+ 3·2	139	0	1	0·03	−0·71	*	*
	Churchstoke ℳ	81	45	73·8	51·8	62·1	+ 3·6	141	0	1	0 01	−0·63	34	35
	Hereford ℳ	85	46	77·3	53·6	64·7	+ 6·0	159	0	0	—	−0·63	*	*
	Circncester	83	45	73·0	52·1	61·9	+ 3·0	139	0	0	—	−0·76	36	38
	Oxford	84	51	75·1	54·4	64·1	+ 3·6	153	0	0	—	−0·57	52	54
5. ENGLAND, S.	London†	87	52	78·1	55·4	66·1	+ 4·8	169	0	0	—	−0·53	49	51
	Strathfield Turgiss ℳ	84	55	78·5	57·8	67·5	+ 7·0	179	0	0	—	−0·53	*	*
	Dungeness	75	49	69·9	54·4	61·7	+ 1·2	138	0	0	—	−0·52	*	*
	Hastings (St. Leonard's)	77	55	70·9	57·2	63·6	+ 2·9	151	0	0	0·01‖	−0·58	52	54
	Southampton	80	48	75·4	56·0	65·1	+ 4·5	162	0	0	—	−0·63	48	50
	Hurst Castle	77	50	71·4	56·9	63·7	+ 3·1	152	0	3	0·03	−0·59	*	*
	Stowell ℳ	79	47	71·3	54·1	62·2	+ 2·8	141	0	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	64	52	61·1	53·6	57·1	+ 1·0	106	0	7	1·92	+0·71	*	*
	Glasgow	69	50	64·8	53·3	58·7	+ 3·0	117	0	4	0·38	−0·52	21	21
	Ardrossan	69	53	63·0	55·1	58·8	+ 2·5	118	0	5	0·48	−0·44	*	*
	Douglas (Isle of Man)	66	45	62·7	52·8	57·5	+ 0·5	109	0	3	0·16	−0·70	21	22
7. ENGLAND, N.W.	Newton Reigny (Penrith)	73	45	67·6	51·9	59·3	+ 2·9	121	0	2	0·19	−0·56	37	38
	Barrow-in-Furness	71	53	64·6	56·6	60·4	+ 1·6	129	0	4	0·15	−0·70	*	*
	Stonyhurst	76	52	69·0	54·6	61·4	+ 3·1	136	0	3	0·22	−0·85	25	26
	Blackpool ℳ	76	53	68·8	56·1	62·1	+ 2·6	141	0	2	0·06	−0·64	27	28
	Manchester	78	50	71·3	53·8	62·0	+ 3·7	140	0	1	0·06	−0·77	*	*
	Liverpool Obsy (Bidston)	77	55	70·1	57·0	63·2	+ 3·8	148	0	1	0·03	−0·66	*	*
	Llandudno ℳ	73	55	68·8	56·6	62·3	+ 2·6	142	0	2	0·27	−0·38	34	35
	Holyhead	65	55	63·7	56·7	60·0	+ 1·1	126	0	1	0·05	−0·64	*	*
8. ENGLAND, S.W.	Llandovery	81	43	72·7	51·1	61·3	+ 2·5	135	0	3	0·17	−0·48	*	*
	Pembroke	63	56	62·4	58·0	60·0	+ 2·3	126	0	3	0·08	−0·63	21	22
	Arlington (N. Devon)	?77	51	?65·4	?54·9	?61·7	+?3·5	?138	0	1	0·22	−1·03	*	*
	Cullompton ℳ	80	46	73·6	53·7	63·1	+ 3·2	148	0	0	—	−0·70	37	39
	Falmouth	71	54	67·3	57·4	62·1	+ 1·9	141	0	1	0·04	−0·89	39	41
	Plymouth	72	49	69·4	56·8	62·7	+ 1·5	145	0	1	0·01	−0·73	44	46
	Prawle Point	75	53	68·3	56·3	61·9	+ 3·7	139	0	1	0·10	?	*	*
9. IRELAND, N.	Malin Head	68	52	63·9	54·4	58·9	+ 2·7	118	0	6	0·64	?	*	*
	Londonderry	72	48	67·7	53·1	60·0	+ 3·0	126	0	6	0·80	−0·05	*	*
	Mullaghmore	73	55	66·1	56·9	61·2	+ 3·2	134	0	5	1·34	+0·50	*	*
	Belmullet	65	50	62·4	54·9	58·4	+ 1·6	115	0	7	1·39	?	*	*
	Markree Castle	72	46	65·3	51·9	58·2	+ 0·5	113	0	6	1·29	+0·49	17	18
	Brookeborough								0				*	*
	Armagh	70	49	66·1	53·9	59·6	+ 1·8	123	0	5	0·58	−0·07	23	24
	Donaghadee	68	48	66·3	52·9	59·2	+ 2·5	120	0	4	0·47	−0·23	*	*
	Edgeworthstown	69	46	65·6	52·6	58·7	+ 0·7	117	0	5	0·65	−0·14	*	*
10. IRELAND, S.	Dublin	73	54	69·4	57·4	63·0	+ 4·8	147	0	2	0·09	−0·54	30	31
	Parsonstown	71	48	66·4	53·4	59·5	+ 1·1	123	0	3	0·22	−0·58	16	16
	Kilkenny	72	48	68·6	55·0	61·4	+ 3·4	136	0	3	0·19	−0·56	*	*
	Waterford	68	46	67·3	55·8	60·3	+ 1·8	128	0	3	0·23	−0·62	*	*
	Roche's Point	65	52	63·7	56·3	59·8	+ 0·6	125	0	4	0·27	−0·61	*	*
	Valencia	67	55	64·6	56·9	60·5	+ 1·8	130	0	6	1·00	−0·08	12	13
	Killarney	71	55	66·9	56·7	61·5	+ 2·7	137	0	4	1·30	?	*	*
	Foynes								0				*	*
CHANNEL ISLANDS	Scilly (St. Mary's)												*	*
	Jersey (Noirmont)	77	57	68·9	58·6	63·4	+ 1·8	150	0	3	0·24	−0·33	47	49

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

‖ Dew.

NOTE.—Telegraphic communication with the Scilly Islands is interrupted.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 36.] *New Series.* WEEK ENDING MONDAY, 6TH SEPTEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 144.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	38	61·7	47·8	54·5	1 above.	88	0	1240	−221	669	+159
	1. SCOTLAND, EAST	70	37	65·5	48·9	56·8	2 above.	104	0	1751	−148	734	+191
	2. ENGLAND, N.E.	80	42	67·2	53·6	60·1	4 above.	127	0	1851	−179	697	+215
	3. ENGLAND, EAST	86	52	73·1	56·4	64·3	5 above.	156	0	2223	−125	750	+243
	4. MIDLAND COUNTIES	83	4	69·1	54·0	61·2	3 above.	134	0	2230	−103	721	+217
	5. ENGLAND, SOUTH	87	49	71·9	57·0	64·1	4 above.	155	0	2424 *	−100	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	72	42	63·2	51·3	56·9	1 above.	104	0	1686	−302	579	+181
	7. ENGLAND, N.W.	76	37	65·6	53·7	59·3	1 above.	121	0	1941	−175	612	+229
	8. ENGLAND, S.W.	73	43	64·6	54·0	59·0	1 above.	119	0	2110	−281	490	+257
	9. IRELAND, NORTH	72	34	63·5	50·4	56·6	0 (average).	102	0	1862 †	−211	492	+142
	10. IRELAND, SOUTH	72	43	63·7	51·2	57·2	1 below.	106	0	2154	−185	401	+162
	— CHANNEL ISLANDS	71	52	65·5	56·8	60·9	0 (average).	132	0	2412 †	−152	202	+109

Rainfall.

	DISTRICTS. (See p. 144.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.				Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	6	2 less.	176	+25	22·6	+ 0·1
	1. SCOTLAND, EAST	2	3	4 less.	135	+ 5	16·3	− 1·2
	2. ENGLAND, N.E.	4	3	3 less.	132	+ 6	18·3	+ 0·3
	3. ENGLAND, EAST	4	5	1 less.	128	0	15·8	− 2·0
	4. MIDLAND COUNTIES	5	9	2 more.	131	+ 6	21·2	+ 1·9
	5. ENGLAND, SOUTH	4	10	4 more.	120	0	17·7	− 0·1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	4	16	6 more.	143	+ 2	27·6	+ 1·6
	7. ENGLAND, N.W.	4	8	0 (average).	136	+ 6	25·3	+ 3·0
	8. ENGLAND, S.W.	6	12	2 more.	136	− 1	25·4	− 2·2
	9. IRELAND, NORTH	4	4	4 less.	151 †	− 6	24·5	− 0·2
	10. IRELAND, SOUTH	5	7	1 less.	146 †	− 1	27·0	+ 0·6
	— CHANNEL ISLANDS	5	8	1 more.	157 †	+10	21·0 †	+ 0·7

Bright Sunshine.

	DISTRICTS. (See p. 144.)	For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	34	36	1028	+ 42	30	+ 1
	1. SCOTLAND, EAST	37	39	1117	− 22	33	0
	2. ENGLAND, N.E.	30	32	912	−120	27	− 4
	3. ENGLAND, EAST	44	47	1178	− 74	35	− 3
	4. MIDLAND COUNTIES	24	26	987	−130	30	− 3
	5. ENGLAND, SOUTH	43	46	1192	− 10	36	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	25	26	956	−134	28	− 4
	7. ENGLAND, N.W.	23	25	984	−104	29	− 3
	8. ENGLAND, S.W.	14	15	1141	−159	35	− 4
	9. IRELAND, NORTH	24	26	824	−183	25	− 5
	10. IRELAND, SOUTH	28	30	977	−174	29	− 6
	— CHANNEL ISLANDS	30	33	1416	−116	43	− 3

General Remarks.

Weather was generally very fine and warm during the earlier part of the period, but subsequently became dull and unsettled, with a good deal of thunder and lightning. The darkness which accompanied the thunderstorm of Saturday morning in the south was remarkably dense.

Temperature has varied from 3° to 5° above the mean over central, southern, north-eastern, and eastern England, but in all other parts of Great Britain the excess has been very slight, while in "Ireland, S." a deficit of 1° is shown. The highest of the maxima, which were registered on August 31st, ranged from 69° to 72° in Ireland and Scotland, but over the greater part of England they were considerably higher, ranging from 80° in "England, N.E." to 86° in "England, E." and 87° in "England, S." The lowest of the minima, which were recorded on different days in the various districts, ranged from 34° in "Ireland, N." and 37° in "Scotland, E." and "England, N.W.", to 49° in "England, S." and 52° in "England, E." and the "Channel Islands". At the commencement of the period the minima in Scotland were very high; at Nairn and Leith the thermometer during the night of August 31st—September 1st did not fall below 62°.

Rainfall has been more than the mean in "Scotland, W.", the "Midland Counties", "England, S.", "England, S.W.", and the "Channel Islands", and about equal to it in "England, N.W.", but elsewhere it has been less than the mean value.

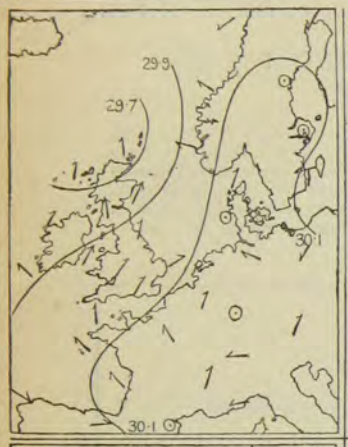
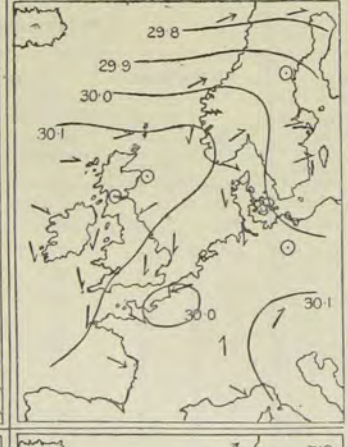
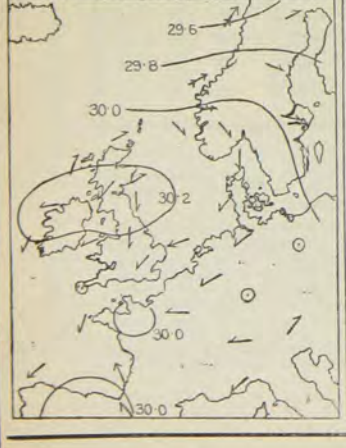
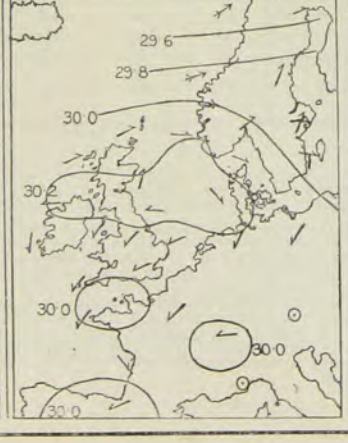
Bright sunshine shows an increase in Ireland and Scotland, but a decrease over England; the percentages of the possible amount of duration varied from 15 to 30 in the "Grazing Districts" and from 26 to 47 in the "Wheat-producing Districts."

Depressions observed.—At the commencement of the period a depression was travelling north-eastwards outside our extreme north-western coasts, causing fresh Southerly to South-Westerly winds at all our western and northern stations. As this passed off, however, the anticyclone previously existing over the south-eastern parts of our area, spread westwards, and by the 3rd a new anticyclone had been formed over Ireland. Under these conditions the wind became light and variable and the only depressions observed were some very shallow ones over the north of France and the south of England. Towards the end of the week pressure gave way decidedly in the west and the disturbances in the south and south-west began partly to fill up and the remainder to pass over our extreme western districts, while the wind returned to the Southward and South-Westward.

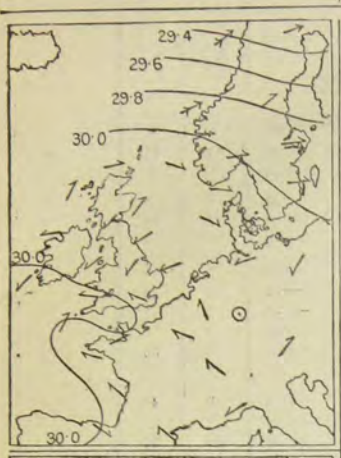
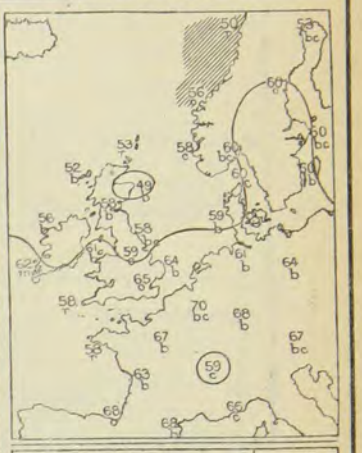
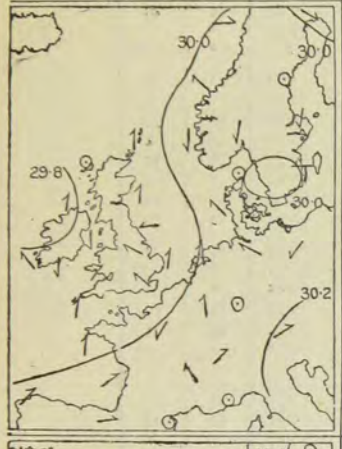
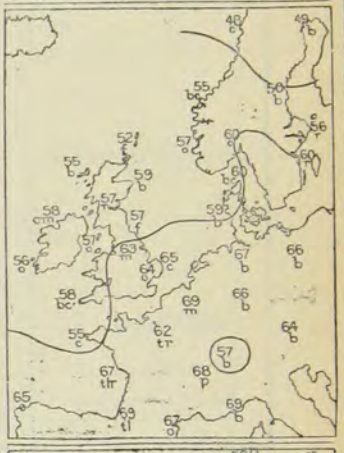
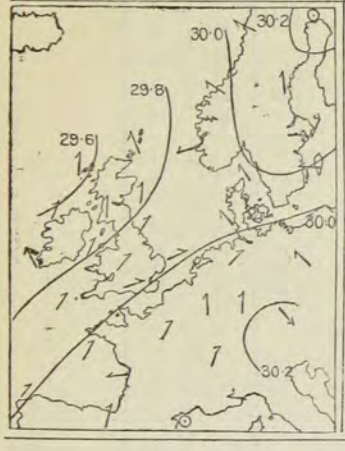
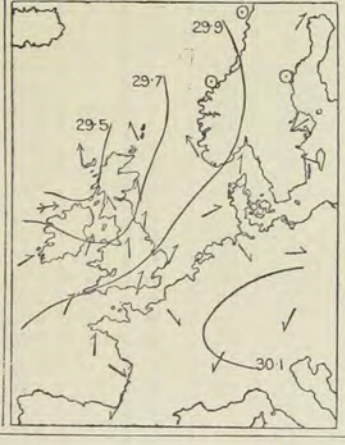
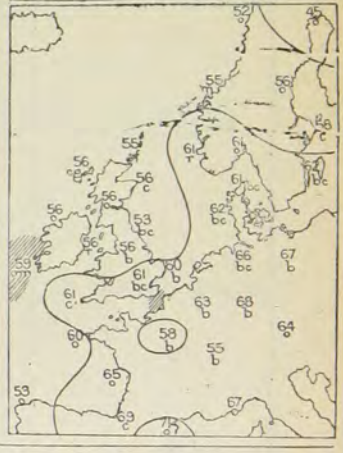
* This value has been altered slightly, owing to some errors in the Returns from Strathfield Turgiss.
† These values have been altered owing to the receipt of some arrears of observations.

E 23504. 350.—9/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, August 31.** *Weather* fine, bright, and very warm over England, France, and Germany; dull and cooler on our west and north-west coasts. Showers at some western and northern stations later in the day. *Temperature* at 8 a.m. varying from between 60° and 65° over the inland parts of England and Scotland to 58° at Valencia and to 55° at Sumburgh Head and Stornoway. Daily maxima as high as 87° in London, 86° at Cambridge, and 83° at Loughborough. *Wind* Southerly and South-Westerly; strong in the north and west, light to moderate in the east and south. At Valencia the wind was very variable as some shallow subsidiary depressions passed over. *Sea* rough in the Minch, moderate to smooth elsewhere. *Barometer* high (30·10 ins. to 30·25 ins.) at the German and French stations; lowest in the extreme north and north-west; gradients moderate to slight, and barometer rising—especially in the west and north-west.	
		Wednesday, September 1. *Weather* still very fine and very warm at the German, French, and most of the British stations, but still cloudy and showery in the west, and becoming so subsequently in the north of England also, with thick high fogs locally. Heavy thunderstorms over France at night. *Temperature* again high in most parts of England; rising to 85° in London and 80° at Cambridge during the afternoon, but to only 74° at Loughborough and 72° at York. Still very warm in France. *Wind* more Westerly at our western and northern stations and of less strength than of late; very variable over France and Germany. Becoming North-Westerly and Northerly in the eastern parts of England later, with colder weather. *Sea* very little disturbed. *Barometer* still high over Germany and France; new anticyclone forming over Bay of Biscay and our south-west coasts, and moving northwards.	
		**Thursday, September 2.** *Weather* changing greatly, becoming fine and dry in Ireland and Scotland, but cold, gloomy, and unsettled over England, especially in the south. More than an inch of rain at Hurst Castle, 0·5 in. at Oxford, and 0·4 in. at Dungeness. *Temperature* fallen greatly over England; reading in London at 2 p.m. 26° lower than that at same hour on 1st. Maximum in London only 66°. *Wind* Northerly at our eastern and southern stations, very variable elsewhere, and light to moderate in force generally. *Sea* very little disturbed. *Barometer* risen decidedly in west and north, fallen in east and south. Anticyclone still holding over Central and Southern Europe, and new one in west and north-west becoming more fully developed. Shallow thunderstorm disturbances forming over Spain and France and extending to our southern counties.	
		**Friday, September 3.** *Weather* fine in Ireland, Scotland, as well as over the North Sea and Germany; very dull, close, and unsettled over England, and becoming thundery and unsettled in France. Thunder and lightning in south and south-east at evening, and rain at times. *Temperature* unsteady, but rising to 70° in London during day. Still high (86° to 88°) over North Germany. *Wind* South-Westerly in the north, North-Easterly in the south; the former current blowing a gale over the northern parts of Norway, but only a light breeze in our Islands; the latter moderate. Very variable winds over France. *Sea* moderate in the south-east, smooth, or nearly so, elsewhere. *Barometer* falling in south-west and also in extreme north. The new anticyclone over our northern districts becoming united with that over South Germany by a "Col" lying over the North Sea. Large depression approaching north of Norway from the westward.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, September 4.** *Weather* becoming extremely unsettled except in the north and over the North Sea and Germany. Severe thunderstorms in the south in morning and afterwards spreading northward. The clouds with the thunderstorm in London being exceptionally dense and causing almost total darkness for some time. Rainfall in south heavy, but varying greatly locally. Thunderstorms again in France at night. *Temperature* changing fitfully ; air close and oppressive. Maximum in London and at Cambridge 79°, at Loughborough 75°. *Wind* at 8 a.m. chiefly Easterly in our Islands, South-easterly over France. Stiff West-South-Westerly gales in Norway, Southerly winds afterwards setting in at our southern stations. *Sea* very little disturbed. *Barometer* falling generally, most in the south-west. Large shallow disturbances over Spain, France, the Bay of Biscay, and our south-western districts ; subsequently moving north-westwards slowly, and partially filling up. Anticyclone over Austria and Germany, and ridge over our northern districts continuing.	
		**Sunday, September 5.** *Weather* still very unsettled in south-west, west, and north, with local thunderstorms and rain ; improving in south-east, and becoming warm there in afternoon ; some showers later. Air close. Thunderstorms at times over France. *Temperature* still changing fitfully ; rising to 72° in London and at Cambridge in afternoon, and to 70° at Loughborough and 71° at York. *Wind* drawing into South and South-West again over the southern counties ; South-Easterly and Southerly in the north—light generally. *Sea* very smooth. *Barometer* rising slowly and unsteadily over France, falling fast on our north-west coasts. Shallow depressions recently observed over Bay of Biscay and France passing north-westwards, and some of them filling up.	
		**Monday, September 6.** *Weather* improving greatly in the east and south, and to a less extent elsewhere. Showers, more or less in all districts, but very slight in the south and east. Thunderstorms again in France at night. *Temperature* not changing much. Maxima 71° in London, Cambridge, and Loughborough, 70° at Spurn Head, and 68° at Nairn. *Wind* Southerly and South-Westerly, moderate to fresh. Increasing from between South and West in Ireland later, and blowing a gale at Mullaghmore. *Sea* rising in west and north-west. *Barometer* uniformly rather high on the Continent, lowest off our north-west coasts. Depression approaching our north-western coasts later.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 141 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	60	44	57·9	49·3	53·4	+ 0·6	80	0	6	1·12	+0·35	*	*
	Stornoway	66	43	61·4	47·7	54·2	+ 1·4	85	0	4	0·33	−0·54	34	36
	Wick	69	38	65·7	46·4	55·8	+ 2·3	97	0	4	0·23	−0·34	*	*
1. SCOTLAND, E.	Nairn	69	39	66·1	47·9	56·6	+ 2·1	102	0	2	0·20	−0·43	*	*
	Aberdeen	70	37	65·4	47·4	56·0	+ 1·4	98	0	2	0·32	−0·42	37	39
	Leith	69	42	65·0	51·3	57·8	+ 1·6	111	0	3	0·36	−0·22	*	*
2. ENGLAND, N.E.	Alnwick Castle	72	42	63·4	50·3	56·5	+ 1·5	102	0	3	0·37	−0·33	*	*
	Durham	75	45	68·4	51·7	59·7	+ 4·1	124	0	3	0·29	−0·32	26	28
	Shields	75	48	64·7	53·4	58·8	+ 3·2	118	0	3	0·26	−0·35	*	*
	Scarborough ¶	79	51	67·4	55·9	61·4	+ 4·6	136	0	4	0·30	−0·34	*	*
	York	80	49	70·9	53·7	61·9	+ 4·9	139	0	3	0·07	−0·55	34	36
	Spurn Head	77	52	68·1	56·4	62·0	+ 4·7	140	0	5	0·51	?	*	*
3. ENGLAND, E.	Hillington ¶	84	52	74·9	55·5	64·7	+ 6·6	159	0	4	0·67	+0·02	41	44
	Yarmouth	74	55	68·1	59·3	63·5	+ 4·2	151	0	3	0·23	−0·38	*	*
	Geldeston	85	54	73·5	57·9	65·3	+ 6·2	163	0	3	1·10	+0·58	48	52
	Cambridge	86	52	73·9	54·3	63·6	+ 4·0	151	0	2	0·18	−0·36	43	46
	Rothamsted	85	53	73·1	55·1	63·7	+ 4·5	152	0	5	0·46	−0·16	*	*
	Ingatestone	86	54	75·0	56·3	65·2	+ 5·6	162	0	4	0·15	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	82	49	71·6	54·4	62·6	+ 4·5	144	0	5	0·21	−0·40	24	26
	Loughborough	83	52	70·4	55·4	62·5	+ 4·2	144	0	5	0·51	−0·14	*	*
	Leicester	82	49	71·8	55·5	63·3	+ 4·9	149	0	6	0·85	+0·18	20	22
	Cheadle ¶	76	48	65·9	52·0	58·6	+ 1·3	116	0	4	1·45	+0·61	*	*
	Churchstoke ¶	78	46	66·6	51·9	58·9	+ 1·3	118	0	5	0·97	+0·31	20	22
	Hereford ¶	81	48	68·3	52·7	60·1	+ 1·4	127	0	6	0·99	+0·31	*	*
	Cirencester	77	42	68·0	54·0	60·7	+ 1·7	131	0	6	1·13	+0·35	21	23
	Oxford	82	53	69·9	56·0	62·6	+ 4·1	144	0	5	1·13	+0·51	33	35
5. ENGLAND, S.	London†	87	54	75·7	57·3	66·1	+ 5·5	169	0	4	0·73	+0·16	36	39
	Strathfield Turgiss ¶	85	49	75·6	54·7	64·7	+ 4·8	159	0	2	0·13	−0·45	*	*
	Dungeness	75	50	70·7	58·6	64·4	+ 4·4	157	0	5	1·23	+0·66	*	*
	Hastings (St. Leonard's)	79	55	72·7	59·2	65·6	+ 5·8	165	0	4	0·34	−0·29	55	59
	Southampton	80	54	72·9	57·0	64·6	+ 5·1	158	0	4	1·42	+0·72	38	41
	Hurst Castle	72	54	69·1	57·6	63·1	+ 3·3	148	0	5	1·33	+0·63	*	*
	Stowell ¶	75	50	66·7	54·3	60·2	+ 1·4	127	0	5	1·78	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	71	43	63·1	49·8	56·1	+ 0·4	99	0	4	1·94	+0·54	*	*
	Glasgow	68	45	62·8	52·3	57·3	+ 2·0	107	0	5	1·43	+0·49	21	22
	Ardrossan	72	46	63·3	51·6	57·2	+ 1·7	106	0	4	1·88	+0·97	*	*
	Douglas (Isle of Man)	68	42	63·5	51·3	57·1	+ 1·1	106	0	4	1·29	+0·42	28	30
7. ENGLAND, N.W.	Newton Reigny (Penrith)	71	37	65·9	49·5	57·3	+ 1·7	107	0	5	0·47	−0·31	34	36
	Barrow-in-Furness	72	48	64·6	54·6	59·4	+ 1·6	122	0	4	0·94	+0·06	*	*
	Stonyhurst	72	49	66·4	53·5	59·6	+ 2·5	123	0	4	0·62	−0·40	26	28
	Blackpool ¶	71	43	66·0	53·6	59·3	+ 1·0	121	0	4	0·73	−0·04	23	24
	Manchester	76	50	67·7	53·3	60·1	+ 2·0	127	0	4	0·51	−0·38	*	*
	Liverpool Obsy (Bidston)	75	51	67·1	55·3	60·9	+ 2·3	132	0	4	0·42	−0·33	*	*
	Llandudno ¶	71	49	64·1	55·0	59·3	+ 0·2	121	0	4	0·67	−0·03	9	10
	Holyhead	67	52	62·6	54·6	58·4	+ 0·1	115	0	4	1·88	+1·15	*	*
8. ENGLAND, S.W.	Llandovery	71	43	67·4	50·4	58·5	+ 1·9	116	0	7	1·73	+0·56	*	*
	Pembroke	63	51	61·9	55·3	58·4	+ 1·9	115	0	6	1·14	+0·36	12	13
	Arlington (N. Devon)	72	50	65·1	53·3	58·9	+ 1·5	118	0	6	1·27	+0·02	*	*
	Cullompton ¶	73	48	66·6	54·2	60·1	+ 0·8	127	0	6	0·90	+0·10	14	15
	Falmouth	69	51	64·2	54·4	59·1	− 0·5	120	0	6	2·21	+1·19	21	23
	Plymouth	68	53	65·2	55·8	60·3	+ 1·0	128	0	6	0·65	−0·25	7	8
	Prawle Point	65	50	61·7	54·7	58·0	+ 1·7	112	0	7	0·47	?	*	*
9. IRELAND, N.	Malin Head	67	47	62·4	52·9	57·4	+ 2·1	108	0	5	0·36	?	*	*
	Londonderry	72	42	66·9	49·7	57·9	+ 1·8	111	0	5	0·60	−0·27	*	*
	Mullaghmore	67	47	63·6	52·6	57·8	+ 0·6	111	0	4	0·24	−0·75	*	*
	Belmullet	67	46	61·4	52·9	57·0	+ 0·8	105	0	5	0·25	?	*	*
	Markree Castle	68	34	64·0	46·0	54·6	− 2·3	88	0	5	0·47	−0·30	28	30
	Brookeborough	70	40	64·5	48·8	56·3	− 0·8	100	0	2	0·18	?	*	*
	Armagh	67	41	63·6	50·1	56·5	− 0·4	102	0	5	0·71	+0·03	20	21
	Donaghadee	65	49	62·3	51·4	56·6	+ 0·7	102	0	5	0·54	−0·19	*	*
	Edgeworthstown	65	41	62·7	49·1	55·6	− 2·0	95	0	4	0·36	−0·43	*	*
10. IRELAND, S.	Dublin	72	47	64·9	54·0	59·2	+ 1·9	120	0	4	0·35	−0·27	21	23
	Parsonstown	66	43	63·9	50·4	56·8	− 1·1	104	0	4	0·45	−0·36	27	29
	Kilkenny	66	44	64·3	51·9	57·8	+ 0·2	111	0	4	1·11	+0·36	*	*
	Waterford	66	43	64·0	50·7	57·0	− 0·6	105	0	4	1·07	+0·21	*	*
	Roche's Point	65	48	62·6	51·4	56·7	− 1·6	103	0	6	1·19	+0·27	*	*
	Valencia	65	48	62·9	52·9	57·7	− 0·4	110	0	6	0·44	−0·66	36	39
	Killarney	66	44	63·5	49·6	56·2	− 2·0	99	0	7	0·71	?	*	*
	Foynes	65	46	63·3	48·9	55·8	− 1·8	97	0	4	0·45	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	54	63·6	56·6	59·9	− 0·4	125	0	5	0·95	+0·24	*	*
	Jersey (Noirmont)	71	52	67·3	57·0	61·9	+ 0·6	139	0	4	0·58	−0·09	30	33

Stations marked ¶ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 37.] *New Series.* WEEK ENDING MONDAY, 13TH SEPTEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

DISTRICTS (See p. 148.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	64	42	57·8	47·4	52·4	0 (average).	73	0	1313	−222	669	+159
1. SCOTLAND, EAST	70	43	63·2	48·2	55·3	1 above.	93	0	1844	−139	734	+191
2. ENGLAND, N.E.	72	43	66·0	51·1	58·2	3 above.	113	0	1964	−159	697	+215
3. ENGLAND, EAST	76	40	69·3	51·7	60·1	2 above.	127	0	2351 *	−104	750	+243
4. MIDLAND COUNTIES	75	41	67·4	51·6	59·1	2 above.	120	0	2350	− 83	721	+216
5. ENGLAND, SOUTH	76	42	67·5	54·9	60·9	3 above.	132	0	2556	− 81	590	+217
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	63	46	59·5	49·7	54·4	0 (average).	87	0	1773	−306	579	+181
7. ENGLAND, N.W.	70	43	63·6	51·4	57·2	1 above.	106	0	2047	−165	612	+229
8. ENGLAND, S.W.	74	40	65·2	53·4	59·0	2 above.	119	0	2329 ‡	−168 ‡	490	+257
9. IRELAND, NORTH	66	38	61·0	48·3	54·3	1 below.	86	0	1948	−213	492	+142
10. IRELAND, SOUTH	70	40	62·8	51·0	56·6	1 below.	102	0	2256	−178	401	+162
— CHANNEL ISLANDS	73	53	66·7	57·3	61·8	2 above.	139	0	2551	−131	202	+109

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 148.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	5	13	5 more.	181	+26	23·9	+ 0·6	27	30	1055	+ 41	31	+ 2
1. SCOTLAND, EAST	5	10	3 more.	140	+ 6	17·3	− 0·9	21	23	1138	− 25	33	0
2. ENGLAND, N.E.	5	6	0 (average).	137	+ 8	18·9	+ 0·2	21	24	933	−128	27	− 4
3. ENGLAND, EAST	3	6	1 less.	131	0	16·4	− 2·0	45	50	1223	− 66	36	− 2
4. MIDLAND COUNTIES	4	6	1 less.	135	+ 6	21·8	+ 1·8	30	33	1017	−133	30	− 3
5. ENGLAND, SOUTH	3	4	3 less.	123	0	18·1	− 0·4	37	41	1229	− 8	36	− 1
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	6	18	9 more.	149	+ 4	29·7 †	+ 2·7	19	21	975	−148	28	− 4
7. ENGLAND, N.W.	6	20	11 more.	142	+ 8	27·3	+ 4·2	18	20	1002	−122	29	− 3
8. ENGLAND, S.W.	4	10	0 (average).	140	− 1	26·4	− 2·3	29	33	1170	−168	35	− 4
9. IRELAND, NORTH	7	20	12 more.	158	− 3	26·5	+ 1·0	23	26	847	−189	25	− 5
10. IRELAND, SOUTH	7	24	15 more.	153	+ 2	29·4	+ 2·2	19	21	996	−188	29	− 6
— CHANNEL ISLANDS	3	5	3 less.	160	+ 9	21·5	+ 0·4	41	46	1457	−123	43	− 3

General Remarks.

Weather has been generally fair over the east and south of England, but unsettled in all other parts of the Kingdom, with much cloud and heavy falls of rain.

Temperature has varied from 1° to 3° above the mean in all the English districts and in the east of Scotland, but in Ireland and the north and west of Scotland it has either equalled the mean value or been slightly below it. The highest of the maxima, which were recorded on the 13th at most of the English stations and on irregular dates in Ireland and Scotland, ranged from 63° to 70° in Scotland, from 66° to 70° in Ireland, and from 70° to 76° over England. The lowest of the minima were registered either on the 10th or 11th, when the thermometer fell to 38° in "Ireland, N." and to between 40° and 43° in nearly all other districts; in "Scotland, W.", however, the lowest temperature was 46°, and in the "Channel Islands" 53°. On the 10th, 11th, and 13th, the minima over England were high, the thermometer at many stations remaining above 60° throughout the night.

Rainfall has been less than the mean over southern, central, and eastern England as well as in the "Channel Islands", but in nearly all other districts there has been a considerable excess.

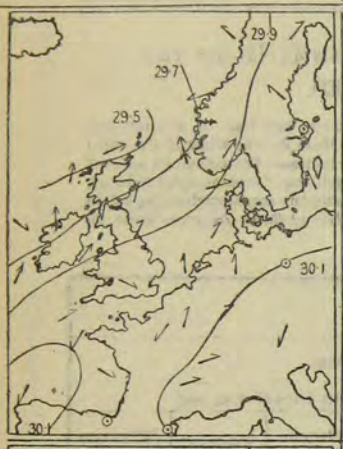
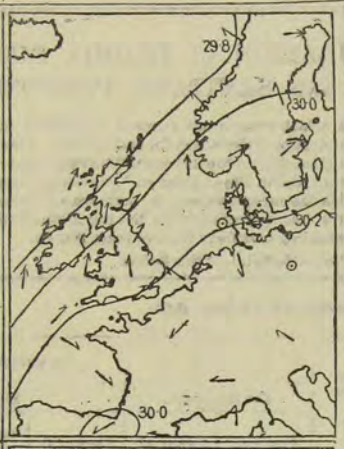
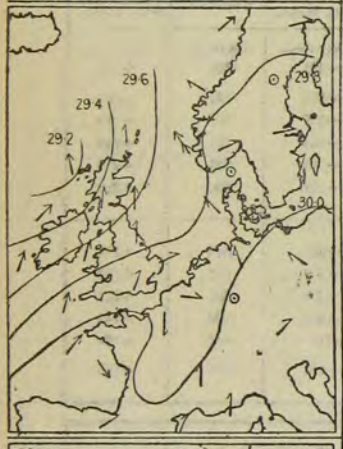
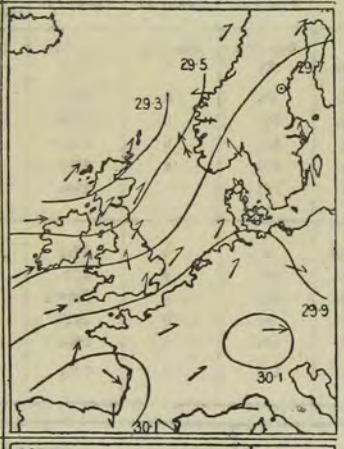
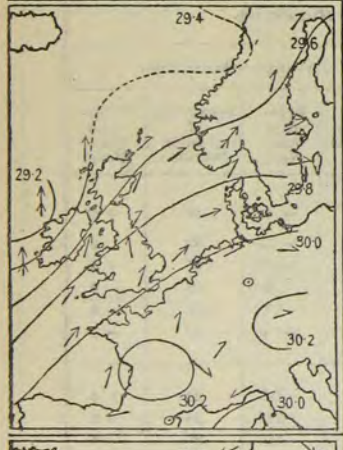
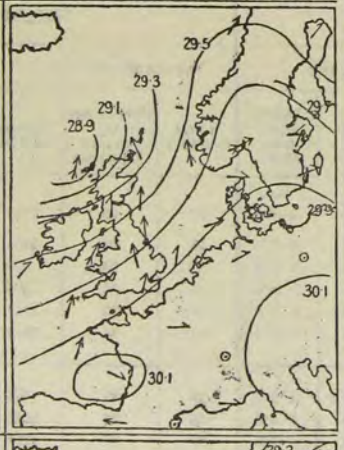
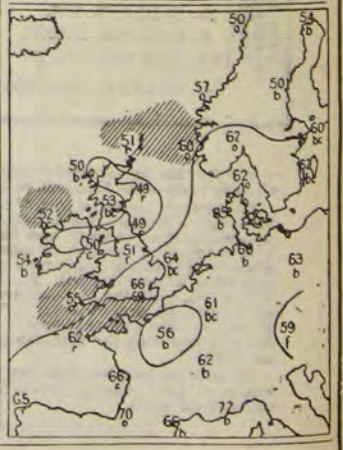
Bright sunshine has been less prevalent in almost all places than it was last week, the percentages of the possible amount of duration ranging from 21 to 30 in Scotland, from 21 to 26 in Ireland, and from 24 to 50 in England and the "Channel Islands".

Depressions observed.—During the whole of this period the distribution of barometric pressure over our Islands was cyclonic, while over France and Germany it was anti-cyclonic. Some large and important depressions travelled in a north-easterly direction over or outside of our western and north-western coasts, while a few subsidiary disturbances passed over England. Southerly to South-Westerly winds consequently prevailed over the United Kingdom, and in the east and south-east they were, excepting on the 10th, moderate in force, but at all our western and northern stations strong winds or gales were very frequent; the gale experienced on the 9th, was very severe on the west and north-west coasts of Ireland and also in the west of Scotland.

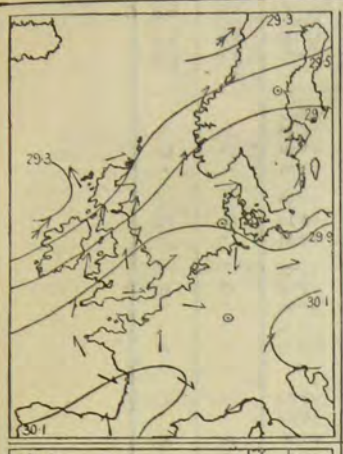
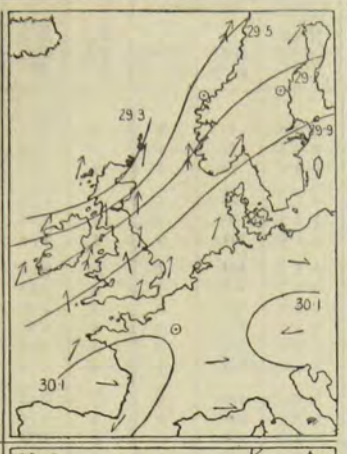
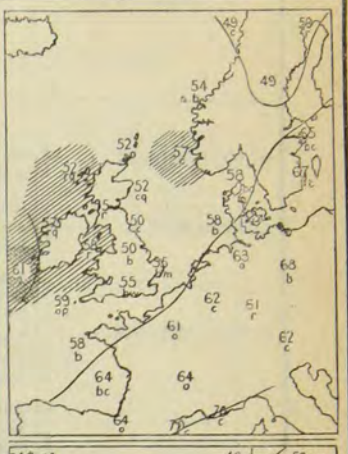
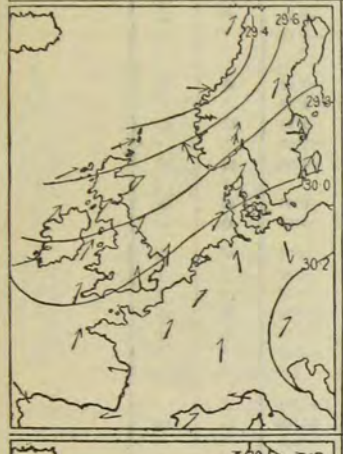
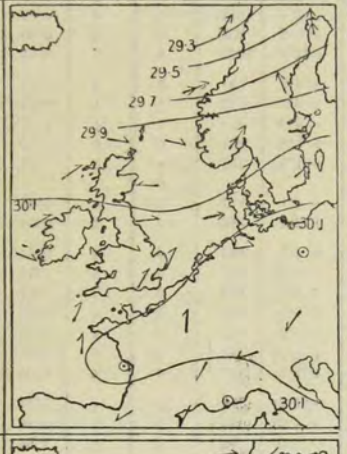
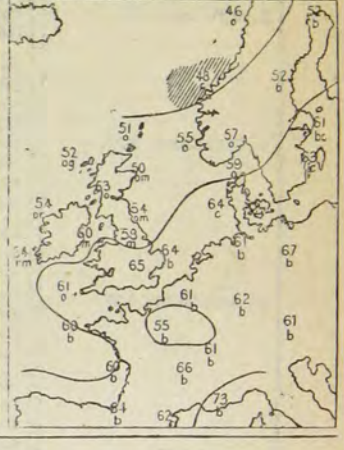
* This value has been altered slightly, owing to an error in a recent Return from Geldeston.
† This value has been altered owing to an error in a recent Return from Douglas.
‡ The corresponding values in last week's Report should be "2210" and "−181" respectively.

E 23562. 350.—9/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, September 7.** *Weather* very fine over Germany, France, and England; dull, squally, and rainy in Ireland and west of Scotland; rainfall very heavy at Mullaghmore. *Temperature* rather high except in west and north; daily maxima as high as 80° to 84° over France, but only 72° in London and 68° at York. *Wind* light to moderate South-Westerly over England, strong from same quarter (with local variations) in west and north, but lulling later. *Sea* rough in extreme west and north. *Barometer* highest on the Continent, lowest to north-westward of our Islands. Depression and "V" shaped subsidiary system in north-west moving quickly to the north-eastward.	
		**Wednesday, September 8.** *Weather* fair at first over England, squally and rainy in west and north, and afterwards becoming unsettled over England and France, with showers and thunder locally. *Temperature* slightly lower than on 7th; daily maxima 69° in London and at York, 66° at Nairn, 62° to 63° over Ireland. *Wind* Southerly and South-Westerly; blowing a gale in Ireland and Scotland, and fresh to strong breeze elsewhere. *Sea* very rough in west and north, rather so in south later. *Barometer* continuing high over Central Europe and France, low to north-westward of the United Kingdom. New depression in north-west moving north-eastwards, and passing to northward of our area later.	
		**Thursday, September 9.** *Weather* still less settled than of late, squally and showery except in the south-east; heavy rain on shores of Irish Sea later. *Temperature* unsteady, but not changing permanently. Rather higher in the south-east than of late; daily maxima 70° or 71° over England, 87° at Perpignan. *Wind* Southerly and South-Westerly, strong on all our coasts, but blowing a severe gale in far west, and fresh to strong gales over Irish Sea. *Sea* high in far west, very rough except in east. *Barometer* still highest over the Continent and lowest off our north-west coasts. New and large depression off the west of Ireland at 8 a.m.; subsequently moving north-eastwards, and followed by a subsidiary disturbance over England.	
		Friday, September 10. *Weather* quieter than of late over Ireland and Scotland, very rough, squally, and rainy over England. Still rather unsettled over France. *Temperature* lower than of late during the day time; daily maxima only 66° in London, 61° at York, and 60° at Nairn. Becoming very cold at night, almost a frost on grass near London. *Wind* light Westerly and South-Westerly in Ireland and Scotland; strong to a gale from South and South-West over England, and afterwards strong in the Netherlands also. *Sea* gone down in west, but rough in south and south-east. *Barometer* remaining high over Germany and France. Yesterday's primary depression passing off, but well marked subsidiary system travelling across England.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, September 11.** *Weather* fine over the Continent and England, dull, squally, and rainy in Ireland and west of Scotland, but improving there later. *Temperature* low generally over England, rising in Ireland, and afterwards over England also. Daily maxima 69° in London, 68° at Loughborough, but 70° at Nairn. *Wind* Southerly and South-Westerly again, light to moderate over England, but blowing a gale in Ireland and Scotland till evening, then lulling. *Sea* slight in east and south-east, very rough in west and north-west. *Barometer* continuing highest over France and Germany, lowest in north-west. New depression in north-west travelling quickly to north-eastward ; no subsidiary disturbance worth notice.	
		**Sunday, September 12.** *Weather* rather changeable and unsettled—sky cloudy at times, showers in various places. Becoming very unsettled in Ireland at night, but fine over England. *Temperature* risen over England, fallen in Ireland. Daily maxima 69° to 71° over England and east of Scotland, only 60° to 63° in Ireland. *Wind* more Westerly than of late and moderate to fresh in force ; falling light and backing to South on the south-western and western coasts of England and Wales later, but veering Northwards in the west of Ireland. *Sea* still rather rough in the far north. *Barometer* highest over Continent and Bay of Biscay, lowest in far north. Gradients moderate. Pressure increasing generally.	
		Monday, September 13. *Weather* becoming very dull, rainy, and cold in Ireland, Scotland, and the west of England, remaining fine over England and very warm. Rainfall heavy at several Scotch and Irish stations. *Temperature* rising to between 70° and 76° over England with close air, but not exceeding 64° or 65° in Ireland. Night warm at English stations. *Wind* light Southerly and South-Easterly over England and Irish Channel, Northerly and freshening in the West of Ireland. *Sea* very little disturbed. *Barometer* highest over Germany, France, and England. Apparently high over the Atlantic also. Shallow depression forming over Ireland, and then moving steadily in a north-easterly direction across Scotland and towards Norway.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇛ = a heavy gale; ➤ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 145 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	58	48	55·7	49·0	52·2	+ 0·3	71	0	6	0·93	+0·14	*	*
	Stornoway	60	43	58·1	46·4	52·0	+ 0·1	70	0	7	2·21	+1·29	27	30
	Wick	64	42	59·7	46·9	53·0	+ 0·4	77	0	3	0·68	+0·08	*	*
1. SCOTLAND, E.	Nairn	70	43	63·6	47·4	55·1	+ 1·6	92	0	3	1·35	+0·72	*	*
	Aberdeen	69	44	61·4	47·9	54·3	+ 0·8	86	0	6	0·90	+0·15	21	23
	Leith	68	47	64·6	49·3	56·6	+ 1·6	102	0	6	0·64	+0·06	*	*
2. ENGLAND, N.E.	Alnwick Castle	65	45	63·1	51·6	57·1	+ 3·1	106	0	5	0·93	+0·23	*	*
	Durham	70	46	65·6	49·8	57·3	+ 2·3	107	0	4	0·89	+0·29	19	21
	Shields	68	47	65·0	49·7	57·0	+ 2·3	105	0	4	0·85	+0·25	*	*
	Scarborough ℜ	72	46	67·5	51·7	59·2	+ 3·4	120	0	5	0·36	−0·33	*	*
	York	70	43	67·6	49·3	58·0	+ 1·9	112	0	6	0·56	−0·11	23	26
	Spurn Head	70	49	67·4	54·4	60·6	+ 4·3	130	0	4	0·15	?	*	*
3. ENGLAND, E.	Hillington ℜ	76	42	69·8	49·6	59·2	+ 2·8	120	0	2	0·44	−0·26	38	42
	Yarmouth	71	47	68·3	54·9	61·3	+ 3·3	135	0	3	0·67	−0·04	*	*
	Geldeston	73	42	69·7	51·6	60·2	+ 2·3	127	0	3	0·69	+0·09	50	56
	Cambridge	76	42	70·9	52·4	61·2	+ 2·5	134	0	2	0·53	−0·04	48	53
	Rothamsted	74	40	68·4	49·4	58·4	+ 0·6	115	0	3	0·49	−0·18	*	*
	Ingatestone	73	42	68·5	?52·2	?60·0	+?1·6	?126	0	3	0·54	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	72	42	68·7	50·3	59·1	+ 2·2	120	0	4	0·43	−0·20	21	23
	Loughborough	74	42	68·7	52·0	60·0	+ 3·1	126	0	4	0·31	−0·38	*	*
	Leicester	75	44	68·8	53·2	60·6	+ 3·6	130	0	4	0·36	−0·34	23	26
	Cheadle ℜ	68	42	64·8	49·9	57·0	+ 1·1	105	0	6	0·79	−0·05	*	*
	Churchstoke ℜ	68	44	66·0	50·8	58·0	+ 1·8	112	0	4	1·17	+0·48	30	33
	Hereford ℜ								0				*	*
	Cirencester	72	41	66·0	50·1	57·7	+ 0·1	110	0	3	0·73	−0·08	32	36
	Oxford	74	47	68·6	54·7	61·3	+ 3·3	135	0	2	0·32	−0·35	42	47
5. ENGLAND, S.	London†	76	45	70·3	55·3	62·4	+ 3·1	143	0	2	0·54	−0·06	39	43
	Strathfield Turgiss ℜ	75	42	68·7	53·3	60·6	+ 2·2	130	0	3	0·39	−0·26	*	*
	Dungeness	70	44	67·4	55·6	61·2	+ 2·3	134	0	3	0·17	−0·46	*	*
	Hastings (St. Leonard's)	71	49	67·3	56·3	61·5	+ 2·9	137	0	2	0·29	−0·38	35	39
	Southampton	74	44	67·9	54·4	60·8	+ 2·8	132	0	4	0·68	−0·08	38	42
	Hurst Castle	72	46	66·4	56·3	61·1	+ 2·8	134	0	3	0·38	−0·39	*	*
	Stowell ℜ	70	48	?64·8	?53·4	?58·8	+?1·3	?118	0	5	0·56	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	?62	46	?58·5	48·2	?53·1	−?1·7	?78	0	7	5·08	+3·47	*	*
	Glasgow	63	47	59·9	49·0	54·2	− 0·5	85	0	7	1·90	+0·93	21	23
	Ardrossan	63	49	59·7	51·3	55·3	+ 1·0	93	0	6	1·54	+0·64	*	*
	Douglas (Isle of Man)	61	48	60·0	50·4	55·0	+ 0·5	91	0	6	1·98	+1·09	16	18
7. ENGLAND, N.W.	Newton Reigny (Penrith)	68	45	61·0	49·1	54·8	+ 0·5	90	0	6	2·02	+1·22	18	20
	Barrow-in-Furness	67	48	62·1	53·3	57·4	+ 1·1	108	0	7	2·38	+1·48	*	*
	Stonyhurst	68	44	63·6	48·9	55·9	+ 0·2	97	0	5	2·00	+0·83	19	21
	Blackpool ℜ	70	46	64·5	52·5	58·2	+ 1·6	113	0	5	1·29	+0·42	12	13
	Manchester	70	43	66·1	50·0	57·7	+ 1·1	110	0	7	2·03	+1·06	*	*
	Liverpool Obsy (Bidston)	70	50	65·4	52·0	58·4	+ 0·9	115	0	4	2·06	+1·24	*	*
	Llandudno ℜ	68	49	64·8	52·7	58·4	+ 0·1	115	0	5	1·54	+0·79	22	24
	Holyhead	64	49	61·3	53·0	57·0	− 0·7	105	0	6	2·48	+1·72	*	*
8. ENGLAND, S.W.	Llandovery	74	40	67·6	50·6	58·7	+ 1·9	117	0	7	2·29	+1·10	*	*
	Pembroke	63	52	61·4	55·6	58·1	+ 2·8	113	0	5	2·27	+1·38	19	21
	Arlington (N. Devon)	70	46	65·7	52·0	58·5	+ 1·9	116	0	2	0·67	−0·58	*	*
	Cullompton ℜ	71	40	67·7	51·1	59·0	+ 0·7	119	0	3	0·51	−0·37	30	33
	Falmouth	66	48	64·8	55·1	59·7	+ 0·9	124	0	5	0·84	−0·30	37	42
	Plymouth	69	47	65·7	54·4	59·8	+ 0·5	125	0	4	0·47	−0·50	30	34
	Prawle Point	68	50	63·7	55·1	59·2	+ 2·8	120	0	4	0·17	?	*	*
9. IRELAND, N.	Malin Head	63	45	58·1	48·7	53·2	− 0·7	78	0	7	1·83	?	*	*
	Londonderry	64	43	61·8	47·5	54·3	− 0·6	86	0	7	2·69	+1·81	*	*
	Mullaghmore	63	45	60·4	50·6	55·3	− 0·7	93	0	7	2·92	+1·82	*	*
	Belmullet	62	49	59·3	51·0	55·0	− 0·1	91	0	7	1·94	?	*	*
	Markree Castle	64	38	61·3	44·5	52·5	− 3·5	74	0	7	2·32	+1·57	23	26
	Brookeborough	65	41	61·4	46·3	53·5	− 2·4	81	0	6	2·27	?	*	*
	Armagh	66	45	62·3	48·7	55·2	− 0·6	92	0	7	1·53	+0·81	23	26
	Donaghadee	66	43	62·1	48·4	54·9	+ 0·1	90	0	7	1·16	+0·42	*	*
	Edgeworthstown	64	42	62·7	48·0	55·0	− 1·6	91	0	5	1·68	+0·88	*	*
10. IRELAND, S.	Dublin	70	49	65·7	52·5	58·8	+ 2·7	118	0	7	1·34	+0·74	25	28
	Parsonstown	65	44	62·7	49·1	55·6	− 1·6	95	0	6	1·35	+0·54	17	19
	Kilkenny	66	40	63·7	49·7	56·4	− 0·2	101	0	6	2·06	+1·29	*	*
	Waterford								0				*	*
	Roche's Point	63	48	60·9	51·3	55·9	− 1·1	97	0	7	3·26	+2·29	*	*
	Valencia	63	46	62·0	51·9	56·7	− 0·6	103	0	7	2·08	+0·96	15	17
	Killarney	65	43	62·3	51·5	56·6	− 2·0	102	0	7	4·48	?	*	*
	Foynes	66	46	62·1	51·3	56·4	− 0·6	101	0	7	1·99	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	53	66·1	57·1	61·4	+ 1·8	136	0	3	0·87	+0·07	*	*
	Jersey (Noirmont)	73	53	67·3	57·4	62·1	+ 1·6	141	0	2	0·20	−0·57	41	46

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 38.] *New Series.* WEEK ENDING MONDAY, 20TH SEPTEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS (See p. 152.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	60	31	55·1	42·6	48·5	3 below.	46	0	1359	−237	669	+159
	1. SCOTLAND, EAST	66	31	57·5	39·8	48·2	5 below.	53	6	1897	−161	740	+197
	2. ENGLAND, N.E.	72	33	58·5	46·9	52·4	2 below.	73	0	2037	−172	697	+215
	3. ENGLAND, EAST	78	39	65·2	48·7	56·5	0 (average).	102	0	2453	−101	750	+243
	4. MIDLAND COUNTIES	74	36	64·2	44·4	53·8	2 below.	83	0	2433	− 97	721	+216
	5. ENGLAND, SOUTH	81	34	66·9	49·1	57·6	1 above.	109	0	2665	− 81	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	61	36	57·7	44·8	51·5	2 below.	67	0	1840	−320	579	+181
	7. ENGLAND, N.W.	64	28	59·7	45·7	52·4	3 below.	73	0	2120	−186	612	+229
	8. ENGLAND, S.W.	74	39	64·3	50·5	57·1	1 above.	106	0	2435	−168	490	+257
	9. IRELAND, NORTH	67	33	60·6	44·8	52·4	2 b elow.	73	0	2021	−221	492	+142
	10. IRELAND, SOUTH	67	36	62·2	49·5	55·5	0 (average).	95	0	2352 *	−173	401	+162
	— CHANNEL ISLANDS	80	50	65·7	56·5	60·9	2 above.	132	0	2683	−118	202	+109

	DISTRICTS. (See p. 152.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	2	7 less.	182	+22	24·1	0·0	42	48	1097	+ 62	31	+ 2
	1. SCOTLAND, EAST	0	less than ½	6 less.	140	+ 2	17·3	− 1·5	34	39	1172	− 8	33	0
	2. ENGLAND, N.E.	1	less than ½	6 less.	138	+ 5	18·9	− 0·4	23	27	956	−127	27	− 4
	3. ENGLAND, EAST	0	-	7 less.	131	− 4	16·4	− 2·7	52	60	1275	− 43	36	− 2
	4. MIDLAND COUNTIES	0	-	7 less.	135	+ 2	21·8	+ 1·1	47	54	1064	−112	30	− 4
	5. ENGLAND, SOUTH	1	less than ½	7 less.	124	− 4	18·1	− 1·1	49	57	1278	+ 13	37	+ 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	1	2	9 less.	150	+ 1	29·9	+ 2·0	41	47	1016	−126	29	− 3
	7. ENGLAND, N.W.	0	-	9 less.	142	+ 4	27·3	+ 3·3	47	54	1049	− 98	30	− 2
	8. ENGLAND, S.W.	0	-	11 less.	140	− 5	26·4	− 3·4	41	48	1211	−158	35	− 4
	9. IRELAND, NORTH	0	-	8 less.	158	− 8	26·5	+ 0·2	48	56	895	−163	25	− 5
	10. IRELAND, SOUTH	1	1	8 less.	154	− 1	29·4 *	+ 1·3	48	55	1044	−167	30	− 4
	— CHANNEL ISLANDS	2	1	8 less.	162	+ 6	21·6 ½	− 0·4	65	76	1522	− 99	44	− 3

General Remarks.

Weather has been fine and dry in all parts of the Kingdom.

Temperature has continued a little above the mean in "England, S.", "England, S.W.", and the "Channel Islands", and has been about equal to it in "England, E." and "Ireland, S.", but in all other districts it has been below its normal value, the deficit in "Scotland, E." being as much as 5°. The highest of the maxima, which were recorded on the 14th, ranged from 60° to 67° in Ireland, Scotland, and the north-west of England, to 78° in "England, E.", 80° in the "Channel Islands", and 81° in "England, S." Towards the end of the period the daily maxima were low for the season, scarcely exceeding 50° in Scotland, and not reaching 60° in many parts of England and Ireland. The lowest of the minima, which were generally registered either on the 17th or 18th, varied between 28° in "England, N.W." (at Newton Reigny), 31° in "Scotland, N." and "Scotland, E.", and 39° in "England, E." and "England, S.W."; in the "Channel Islands", however, the lowest reading was 50°. During the night of the 16th—17th frost was experienced on the grass even as far south as London.

Rainfall has been less than the mean in all districts. Over the greater part of the Kingdom the weather has been altogether rainless.

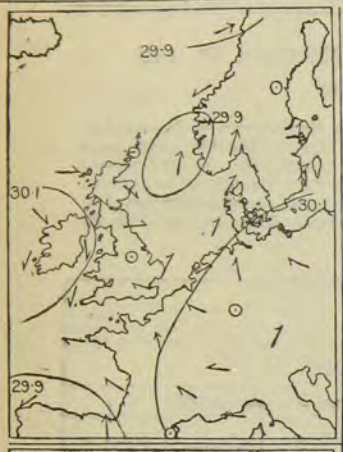
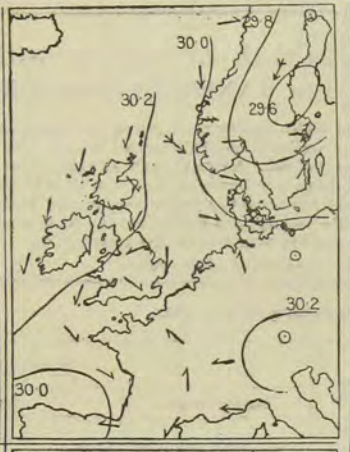
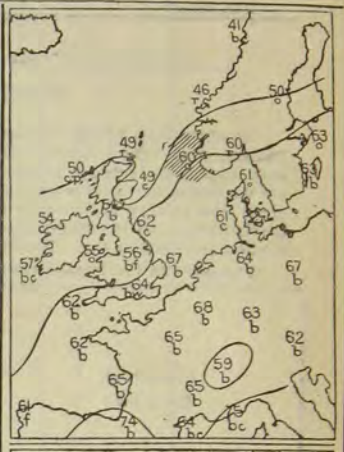
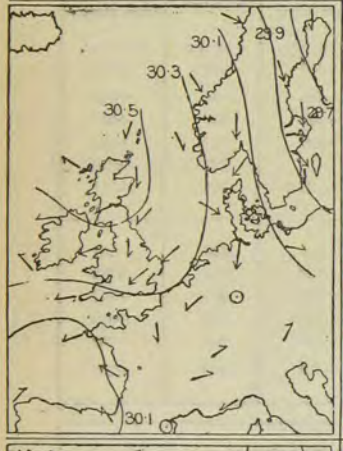
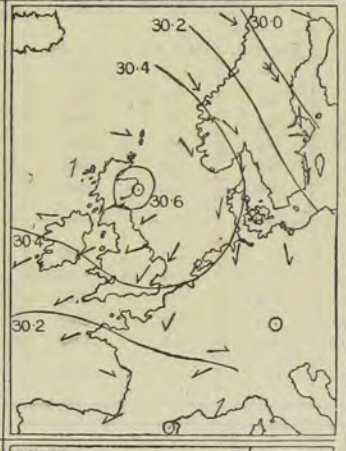
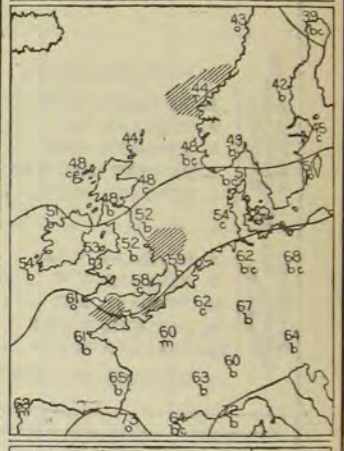
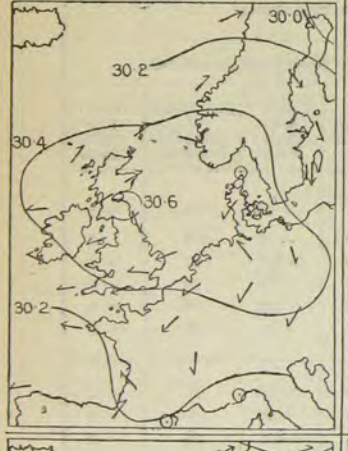
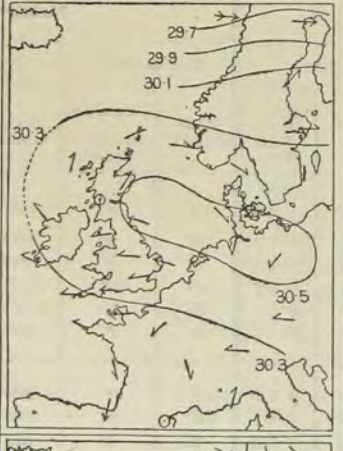
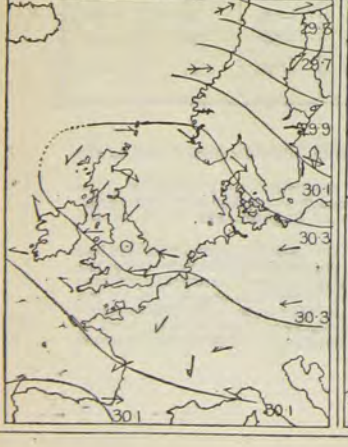
Bright sunshine shows a decided increase nearly everywhere, the percentages of the possible amount of duration ranging from 27 in "England, N.E." and 39 in "Scotland, E." to between 54 and 60 in Ireland and most parts of England, and to 76 in the "Channel Islands".

Depressions observed.—At the commencement of the period a depression which had previously passed over our Islands was moving in a north-easterly direction across the North Sea to Norway; but as this disappeared the distribution of barometric pressure over the United Kingdom became anticyclonic and no depressions appeared in our immediate neighbourhood till towards the end of the week, when some shallow disturbances were formed over France and our south-east coasts. Easterly to North-Easterly winds of moderate strength were most general in England and Ireland, but in Scotland they drew into South-East and were light in force.

* These values have been altered slightly, owing to the receipt of some arrears of observations.

E 23634. 350.—9/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, September 14.** *Weather* rainy at some of our western and extreme northern stations, but fair or fine elsewhere. Improvement taking place in west and north later. *Temperature* fallen a little in our Islands and Scandinavia, but risen elsewhere; readings over the United Kingdom ranging from 69° at Jersey and 68° at Dungeness to 49° at Sumburgh Head and Aberdeen. Subsequently rising to 80° at Jersey and in London, to 84° at Berlin, Paris, and Brussels, and to 86° at Lyons. *Wind* Northerly in Scotland and the north of Ireland, but North-Easterly at our southern stations, Easterly in France, and Southerly on the eastern shores of the North Sea; light or moderate in force generally. *Sea* moderate to smooth. *Barometer* falling on the eastern shores of the North Sea, but rising elsewhere. Areas of high pressure lying respectively over Eastern Europe and to the westward of Ireland, with a well-marked but shallow depression off the west of Norway. Depression subsequently moving eastwards across Scandinavia.	
		**Wednesday, September 15.** *Weather* fair generally, but showery at some of the extreme northern stations. *Temperature* fallen several degrees; readings over our Islands ranging from 63° at Jersey to 43° at Parsonstown and 41° at Nairn. Maxima over England nearly 20° lower than on previous day. *Wind* fresh or strong from North on the eastern shores of the North Sea and from East or North-East over Ireland, England, and the Channel. Light North-Easterly in Scotland; moderate Easterly over Bay of Biscay. *Sea* rough on our south and south-east coasts, but moderate to smooth elsewhere. *Barometer* rising generally. Anticyclone, with readings above 30·5 ins., lying over Scotland, with low pressures in the north of Sweden and relatively low readings over the Bay of Biscay. Slight fall taking place on our west coasts later.	
		**Thursday, September 16.** *Weather* fair generally, but cloudy in some places, and foggy in the south of Scotland. Rain falling later in the north of Scandinavia. *Temperature* risen a little at our western, northern, and the Scandinavian stations, but fallen elsewhere; readings over our Islands ranging from 59° at Jersey to 39° at Leith. Frost occurring at night in several parts of Great Britain. *Wind* strong from east in the Channel, but moderate from South-East on our western coasts, from South-West in the north, and from North-West on the eastern shores of the North Sea. South-Westerly gales subsequently blowing in the north of Scandinavia. *Sea* rough in the Channel, but moderate to smooth elsewhere. *Barometer* rising at all but the Scotch stations. Large anticyclone with readings above 30·5 ins. lying over the North Sea and our northern districts. Extensive depression subsequently appearing over north of Scandinavia and fall of barometer taking place generally.	
		**Friday, September 17.** *Weather* dull in the north of Scandinavia and south-west of France, with rain at Christiansund, and a thunderstorm at Biarritz, but fair or fine elsewhere. Thunderstorms occurring over Southern Europe at night. *Temperature* fallen in Scotland and also over France and Germany, but risen in most other localities; readings over our Islands ranging from 61° at Jersey to 39° at Nairn. *Wind* Westerly in Scandinavia and the north of Scotland, with fresh gales at Bodö and Christiansund, but chiefly Easterly elsewhere. Subsequently veering to North-West on the eastern shores of the North Sea. *Sea* rather rough on our south-west and south-east coasts, but moderate to smooth elsewhere. *Barometer* falling generally. Anticyclonic band extending from Germany to our north-east coasts, with large depression over the north of Scandinavia. Depression subsequently moving eastward, but small shallow disturbances appearing over France.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

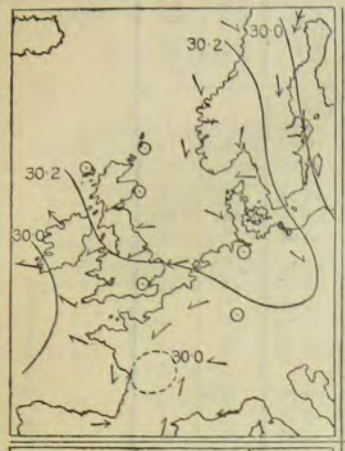
Weather

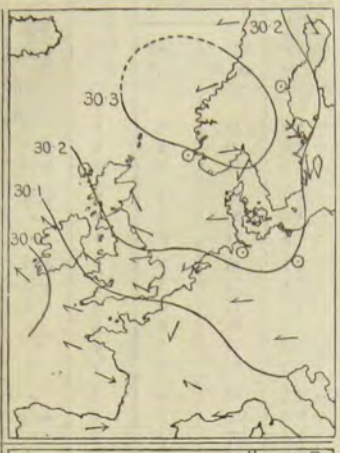
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, September 18.

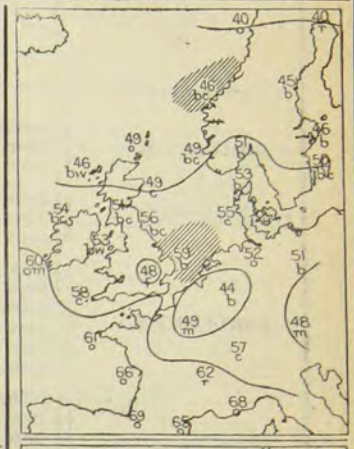
Weather dull and unsettled in the south and extreme north of Europe, but fine elsewhere. Thunderstorms occurring over France and Germany at night, and showers falling in the south of Ireland.

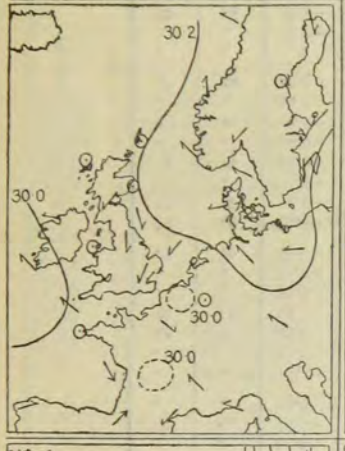
Temperature fallen in Scandinavia, but risen elsewhere; readings over our Islands ranging from 61° at Jersey to 48° in London and 41° at Nairn.

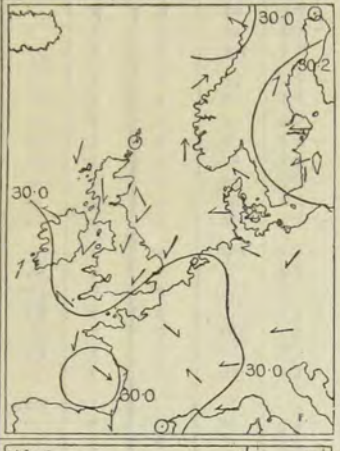
Wind strong Northerly in Sweden, but moderate Easterly over England, South-Easterly in Ireland, and Westerly in Spain.

Sea rather rough off the east of England, but moderate to smooth elsewhere.

Barometer falling at all but the Scandinavian stations. Anticyclone lying over the North Sea with lowest pressures over Sweden, but areas of relatively low readings over France and our south-west coast. Fall continuing over our Islands and France all day.







Sunday, September 19.

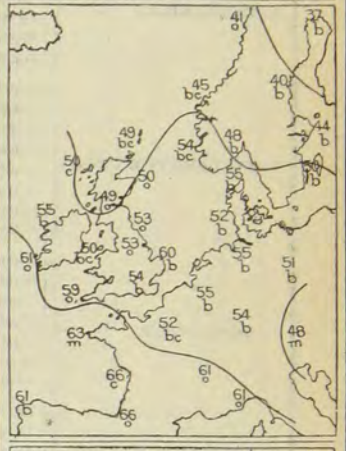
Weather fair on the whole, but misty in several parts of our Islands and dull in the south of France.

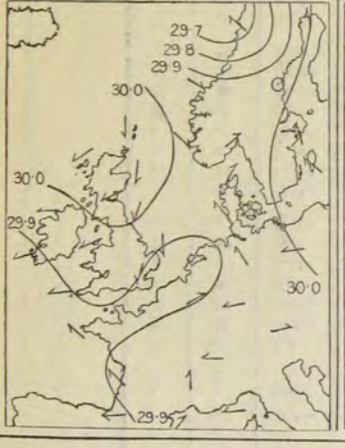
Temperature changed irregularly; readings over our Islands ranging from 61° at Valencia and 60° at Yarmouth and Jersey to 45° at Nairn.

Wind North-Easterly on our eastern and southern coasts and variable in France, but Easterly and South-Easterly elsewhere; light or moderate in force generally.

Sea moderate to smooth.

Barometer falling at all but the Swedish stations. Anticyclone lying over Scandinavia with an area of low pressure off the south-west of Ireland and some shallow local disturbances over France. Fall continuing all day.





Monday, September 20.

Weather rainy in the north of Scandinavia, and dull on our extreme south-west and north coasts, but fair or fine elsewhere.

Temperature fallen a little on our western and northern coasts, but changed little and irregularly elsewhere; readings over our Islands ranging from 61° at Jersey and 60° at Valencia to 48° in the Shetlands.

Wind varying from between North and East in our Islands, but South-Easterly at many of the continental stations; light or moderate in force generally. Subsequently veering to South-East on our western coasts.

Sea moderate to smooth.

Barometer falling generally—most in Scandinavia. Area of high pressure lying over our northern coasts, with a depression near Bodo, and relatively low readings to the south-westward of our Islands. Depression subsequently moving south-eastwards and barometer continuing to fall generally.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 149 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	55	38	52·4	43·7	47·8	− 3·1	41	0	1	0·31	−0·51	*	*
	Stornoway	59	38	56·4	42·0	48·9	− 1·7	48	0	1	0·11	−0·86	42	48
	Wick	60	31	56·4	42·1	48·9	− 2·6	48	0	2	0·04	−0·58	*	*
1. SCOTLAND, E.	Nairn	61	31	56·6	37·3	46·5	− 5·8	51	13	1	0·07	−0·56	*	*
	Aberdeen	61	33	56·9	40·9	48·5	− 3·8	50	3	0	—	−0·75	34	39
	Leith	66	33	58·9	41·3	49·7	− 3·8	57	2	0	—	−0·58	*	*
2. ENGLAND, N.E.	Alnwick Castle	58	33	54·3	42·7	48·2	− 4·7	43	0	1	0·01	−0·71	*	*
	Durham	64	37	57·0	43·9	50·1	− 4·1	57	0	1	0·11	−0·49	13	15
	Shields	63	40	57·1	47·7	52·2	− 1·1	71	0	1	0·01	−0·59	*	*
	Scarborough ℳ	72	47	60·2	49·5	54·6	− 0·2	88	0	0	—	−0·70	*	*
	York	70	40	62·0	45·3	53·3	− 1·6	79	0	0	—	−0·70	33	38
	Spurn Head	69	44	60·4	52·0	56·0	+ 1·0	98	0	0	—	?	*	*
3. ENGLAND, E.	Hillington ℳ	75	42	64·7	46·1	55·0	− 0·1	91	0	0	—	−0·71	47	54
	Yarmouth	72	53	63·9	56·1	59·8	+ 3·3	125	0	1	0·04	−0·70	*	*
	Geldeston	78	49	64·5	50·7	57·3	+ 0·7	107	0	0	—	−0·65	54	62
	Cambridge	78	39	67·0	45·4	55·7	− 1·7	96	0	0	—	−0·58	55	63
	Rothamsted	76	40	64·8	45·0	54·4	− 2·0	87	0	0	—	−0·70	*	*
	Ingatestone	78	45	66·0	48·7	56·9	0·0	104	0	0	—	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	72	38	63·6	43·6	53·1	− 2·5	78	0	0	—	−0·65	35	40
	Loughborough	73	40	66·6	44·1	54·8	− 0·6	90	0	0	—	−0·71	*	*
	Leicester	73	41	66·0	44·9	55·0	− 0·4	91	0	0	—	−0·70	48	55
	Cheadle ℳ	67	42	61·5	46·3	53·5	− 0·8	81	0	0	—	−0·84	*	*
	Churchstoke ℳ	66	36	61·4	41·3	50·9	− 4·0	65	2	0	—	−0·72	49	56
	Hereford ℳ	70	38	65·1	43·3	53·7	− 1·9	82	0	0	—	−0·75	*	*
	Cirencester	71	41	63·6	45·1	53·9	− 2·0	83	0	0	—	−0·82	48	55
	Oxford	74	42	65·6	46·9	55·8	− 0·5	97	0	0	—	−0·68	56	64
5. ENGLAND, S.	London†	80	40	68·7	48·3	58·0	+ 0·4	112	0	0	—	−0·60	40	46
	Strathfield Turgiss ℳ	77	34	68·3	42·7	54·9	− 1·9	90	0	0	—	−0·67	*	*
	Dungeness	72	46	65·0	53·1	58·8	+ 1·3	118	0	1	0·05	−0·63	*	*
	Hastings (St. Leonard's)	75	49	65·7	52·4	58·7	+ 1·4	117	0	2	0·20	−0·51	53	61
	Southampton	81	44	69·3	48·6	58·5	+ 2·2	116	0	0	—	−0·77	55	63
	Hurst Castle	75	45	67·1	52·1	59·2	+ 2·0	120	0	1	0·01	−0·76	*	*
	Stowell ℳ	74	40	64·5	46·3	55·0	− 1·1	91	0	0	—	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	?	40	?	41·6	?	?	?	?	1	0·61	−1·11	*	*
	Glasgow	58	36	56·0	43·9	49·7	− 3·9	54	0	0	—	−0·97	29	33
	Ardrossan	61	38	58·7	45·3	51·7	− 1·3	68	0	0	—	−0·90	*	*
	Douglas (Isle of Man)	61	43	58·3	48·5	53·2	+ 0·1	78	0	0	—	−0·90	52	60
7. ENGLAND, N.W.	Newton Reigny (Penrith)	62	28	57·3	36·2	46·3	− 6·6	54	16	0	—	−0·81	44	51
	Barrow-in-Furness	62	41	59·6	47·7	53·4	− 1·6	80	0	0	—	−0·92	*	*
	Stonyhurst	64	38	58·9	45·4	51·8	− 2·3	69	0	0	—	−1·18	53	61
	Blackpool ℳ	62	35	59·7	43·9	51·4	− 3·9	66	0	0	—	−0·93	40	46
	Manchester	64	40	60·7	46·8	53·4	− 1·7	80	0	0	—	−0·98	*	*
	Liverpool Obsy (Bidston)	64	44	60·4	49·4	54·6	− 1·7	88	0	0	—	−0·82	*	*
	Llandudno ℳ	63	43	61·2	47·6	54·1	− 3·2	85	0	0	—	−0·78	49	56
	Holyhead	63	46	59·9	48·6	54·0	− 2·8	84	0	0	—	−0·79	*	*
8. ENGLAND, S.W.	Llandovery	71	39	66·4	42·6	53·9	− 1·7	83	0	0	—	−1·19	*	*
	Pembroke	62	48	61·0	51·7	56·1	+ 1·6	99	0	1	0·01	−0·92	44	51
	Arlington (N. Devon)	69	45	63·9	49·0	56·1	+ 0·6	99	0	0	—	−1·24	*	*
	Cullompton ℳ	73	43	66·2	46·9	56·1	− 0·8	99	0	0	—	−0·91	49	56
	Falmouth	70	53	63·0	55·7	59·2	+ 1·7	120	0	0	—	−1·22	23	27
	Plymouth	72	51	65·2	53·1	58·9	+ 0·9	118	0	1	0·02	−0·97	48	56
	Prawle Point	74	52	64·4	54·4	59·2	+ 3·9	120	0	0	—	?	*	*
9. IRELAND, N.	Malin Head	67	43	58·6	48·1	53·1	+ 0·6	78	0	0	—	?	*	*
	Londonderry	67	39	64·4	42·1	52·7	− 0·9	75	0	0	—	−0·89	*	*
	Mullaghmore	63	47	60·6	49·4	54·7	− 0·1	89	0	0	—	−1·10	*	*
	Belmullet	66	45	62·6	48·7	55·3	+ 1·5	93	0	0	—	?	*	*
	Markree Castle	63	33	61·1	40·6	50·4	− 4·5	65	4	1	0·01	−0·75	44	51
	Brookeborough	63	34	61·1	40·7	50·5	− 4·1	65	4	0	—	?	*	*
	Armagh	62	36	59·3	40·7	49·6	− 5·0	59	4	0	—	−0·74	52	60
	Donaghadee	59	42	57·9	50·0	53·8	− 0·9	83	0	0	—	−0·74	*	*
	Edgeworthstown	62	40	60·1	43·3	51·3	− 5·8	65	0	0	—	−0·80	*	*
10. IRELAND, S.	Dublin	64	45	61·0	48·2	54·3	− 0·5	86	0	0	—	−0·59	60	69
	Parsonstown	66	37	63·4	45·3	53·9	− 2·2	83	0	1	0·06	−0·74	54	62
	Kilkenny	63	43	62·0	48·6	55·0	− 0·6	91	0	0	—	−0·75	*	*
	Waterford	62	46	61·1	50·6	55·6	+ 0·3	95	0	1	0·05	−0·86	*	*
	Roche's Point	62	45	61·0	52·0	56·3	+ 0·5	100	0	2	0·26	−0·76	*	*
	Valencia	67	48	63·7	54·3	58·8	+ 2·5	118	0	3	0·12	−1·02	29	33
	Killarney	66	36	62·4	49·8	55·8	− 0·6	97	0	2	0·19	?	*	*
	Foynes	66	42	62·9	47·0	54·6	− 1·5	88	0	0	—	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	50	63·0	55·6	59·1	+ 0·8	120	0	3	0·07	−0·80	*	*
	Jersey (Noirmont)	80	55	68·4	57·4	62·7	+ 3·3	145	0	1	0·04	−0·79	65	76

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

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VOL. III. No. 39.] *New Series.* WEEK ENDING MONDAY, 27TH SEPTEMBER, 1886. [*Price* 4*d.* [*Annual subscription, post paid,* £1 1*s.* 2*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS (See p. 156.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	39	53·2	43·8	48·2	3 below.	43	0	1402	−250	669	+158
	1. SCOTLAND, EAST	65	36	56·2	44·2	49·9	2 below.	55	0	1952	−173	740	+196
	2. ENGLAND, N.E.	64	39	56·4	46·7	51·3	2 below.	65	0	2102	−180	697	+215
	3. ENGLAND, EAST	65	41	59·4	46·7	52·8	2 below.	76	0	2529	−103	750	+243
	4. MIDLAND COUNTIES	66	38	58·0	45·1	51·2	3 below.	64	0	2497	−111	721	+215
	5. ENGLAND, SOUTH	70	38	61·0	47·2	53·8	2 below.	83	0	2748	− 87	590	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	63	38	55·9	46·1	50·8	1 below.	62	0	1902	−328	579	+181
	7. ENGLAND, N.W.*	63	35	55·7	46·1	50·6	3 below.	60	0	2180	−203	612	+229
	8. ENGLAND, S.W.	67	34	59·2	47·5	53·1	2 above.	78	0	2513	−177	490	+256
	9. IRELAND, NORTH	63	31	57·0	45·3	50·9	2 below.	62	0	2083	−230	492	+142
	10. IRELAND, SOUTH	63	32	58·3	45·5	51·6	3 below.	67	0	2419	−188	401	+162
	— CHANNEL ISLANDS	68	50	60·9	53·5	57·0	1 below.	105	0	2788	−113	202	+ 99

Rainfall. **Bright Sunshine.**

	DISTRICTS. (See p. 156.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	8	0 (average).	188	+23	24·9	0·0	24	29	1121	+ 62	31	+ 2
	1. SCOTLAND, EAST	4	3	3 less.	144	+ 2	17·6	− 1·9	29	35	1201	− 8	33	0
	2. ENGLAND, N.E.	5	3	3 less.	143	+ 6	19·2	− 0·8	13	15	969	−141	27	− 4
	3. ENGLAND, EAST	4	3	4 less.	135	− 4	16·7	− 3·1	14	17	1289	− 65	36	− 2
	4. MIDLAND COUNTIES	3	4	3 less.	138	+ 2	22·2	+ 0·7	18	21	1082	−125	30	− 4
	5. ENGLAND, SOUTH	4	6	2 less.	128	− 3	18·7	− 1·2	14	17	1292	− 6	36	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	8	2 less.	153	− 1	30·7	+ 1·9	21	25	1037	−133	29	− 3
	7. ENGLAND, N.W.*	3	13	3 more.	145	+ 2	28·6	+ 3·6	17	20	1066	−110	30	− 2
	8. ENGLAND, S.W.	3	11	0 (average).	143	− 6	27·5	− 3·3	24	30	1235	−164	35	− 4
	9. IRELAND, NORTH	4	6	2 less.	162	− 9	27·1	− 0·1	20	24	915	−167	25	− 5
	10. IRELAND, SOUTH	4	11	2 more.	158	− 1	30·5	+ 1·5	24	29	1068	−172	30	− 4
	— CHANNEL ISLANDS	4	7	2 less.	166	+ 4	22·3	− 0·6	28	33	1550	−109	44	− 2

General Remarks.

Weather has been very cloudy or dull in all parts of the Kingdom, but excepting in the extreme west and north-west the amount of rainfall has been slight.

Temperature has been below the mean in all districts, the highest of the maxima, which were registered on irregular dates, ranged from 58° in "Scotland, N." to 68° in the "Channel Islands", and 70° in "England, S." The lowest of the minima were generally recorded on the 23rd, when the thermometer fell to between 31° and 32° in Ireland, 36° and 39° in Scotland, and 34° and 41° in England. In the "Channel Islands" the minimum was no lower than 50°.

Rainfall has been rather more than the mean in "England, N.W." and "England, S.", and about equal to it in "Scotland, N." and "England, S.W.", but in all other districts it has been less than its normal amount.

Bright sunshine shows a very general and decided decrease, the percentage of the possible amount of duration ranging from between 15 and 21 over the greater part of England to 33 in the "Channel Islands" and 35 in "Scotland, E."

Depressions observed.—At the commencement of the period a small depression lay near the mouth of the Channel, while pressure was highest over the north of our Islands. By the 23rd, however, this disturbance had dispersed in the neighbourhood of Brittany and the high pressure system in the north was moving slowly down our western coasts, so that the wind, which had previously been fresh or strong from the Eastward, backed gradually to the Northward, and moderated. Towards the end of the period the high pressure had reached France, the wind in our Islands had backed to the Southward, and depressions skirted our western coasts. The disturbance shown on the 27th was large and deep and caused fresh or strong South-Westerly gales on nearly all our coasts.

* The values in this district are liable to alteration owing to the non-arrival of the Return from Llandudno.

E 23706. 350.—9/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

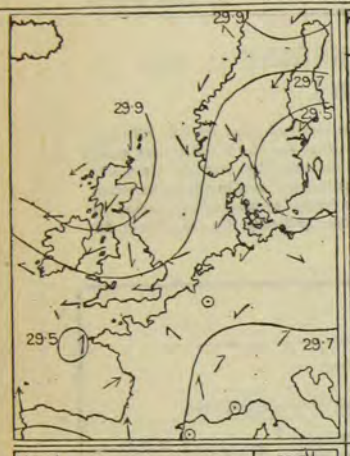
Weather

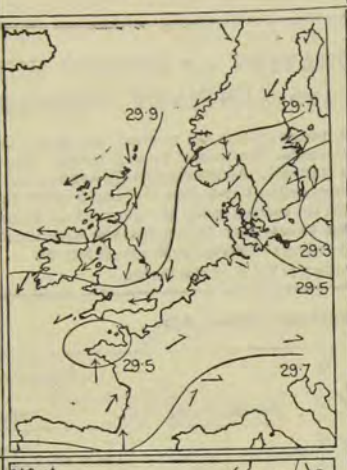
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, September 21.

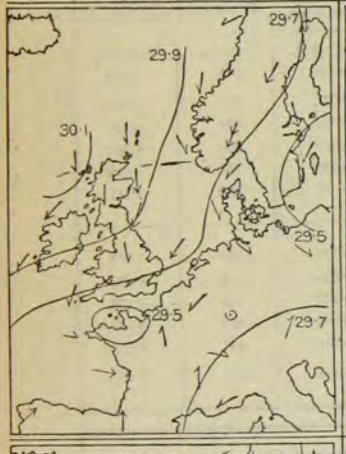
Weather rainy in Sweden and the north of France, but fair or fine in nearly all other parts of Western Europe. Rain setting-in later over the extreme south of England.

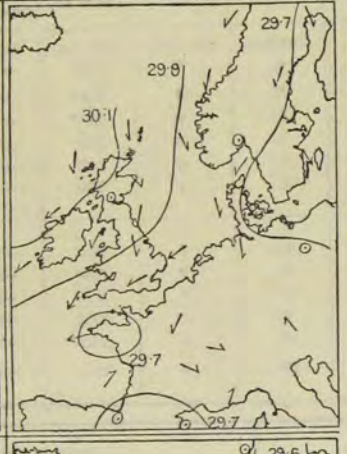
Temperature risen in England, France, and Germany, but changed irregularly elsewhere; readings over our Islands ranging from 61° at Valencia to 46° in the Shetlands.

Wind South-Westerly over Spain and the Bay of Biscay, but North-Easterly or Easterly elsewhere; strong in force on several parts of our coasts.

Sea rather rough at the more exposed English and Irish stations, but moderate or slight elsewhere.

Barometer falling generally. Pressure highest off the north-west of Scotland, with a large area of low readings over the Baltic, and a small depression near the mouth of the Channel. Depression subsequently moving slowly eastwards, and barometer rising on our west coasts.





Wednesday, September 22.

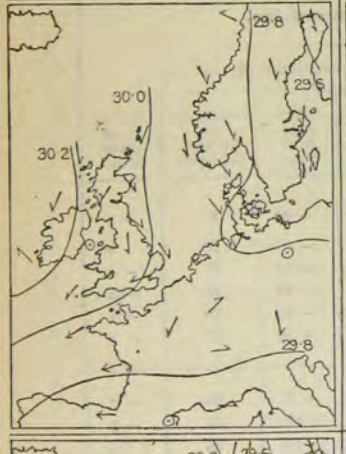
Weather rainy in the extreme south of England and also at some of the French stations, but fair in most other parts of Western Europe. Sky clearing in south later, but thunderstorms occurring in France at night.

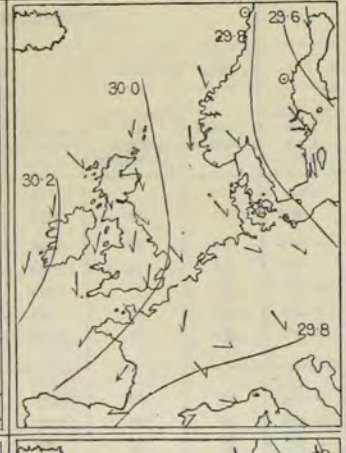
Temperature fallen at all but the Scotch stations; readings over our Islands ranging from 60° at Jersey to 45° in the Shetlands. Frost occurring over central Ireland at night.

Wind South-Westerly or Westerly over Spain and the Bay of Biscay, but Northerly or North-Easterly elsewhere; fresh or strong in force generally. Wind moderating later.

Sea high at Prawle Point, and rough or rather so on all the more exposed parts of our south-west, west, and north-east coasts.

Barometer rising at all but the southern French stations. Pressure highest over the north-west of Scotland, with a depression over the Baltic and another over the western part of the Channel. Former disturbance subsequently passing away to the eastward, and latter filling up.





Thursday, September 23.

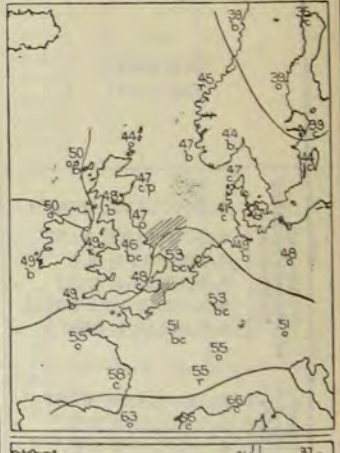
Weather dull and unsettled in Scotland and the south of France, but fair or fine elsewhere. Showers falling later on our north and north-east coasts, and thunderstorms occurring in the south of France.

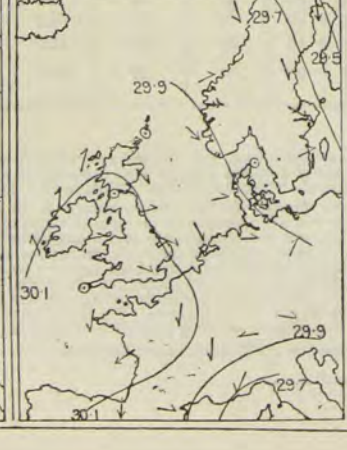
Temperature fallen generally; readings over our Islands ranging from 53° at Yarmouth to 44° in the Shetlands and 36° at Parsonstown. Maxima below 60° generally and below 55° at most of our northern stations.

Wind moderate North-Westerly or Northerly over Scandinavia, Denmark, and the east of Great Britain, light North-Easterly in the south of England, and strong Easterly over the Bay of Biscay.

Sea rather rough at Spurn Head and C. Gris Nez, but moderate to smooth elsewhere.

Barometer rising generally. Pressure highest in Ireland, with areas of low readings over the northern parts of Scandinavia and Spain. Slight fall taking place in north later.





Friday, September 24.

Weather dull over our Islands and Scandinavia, with rain at some of the northern stations, but fine in Denmark, Germany, and France. Rain falling in Ireland later.

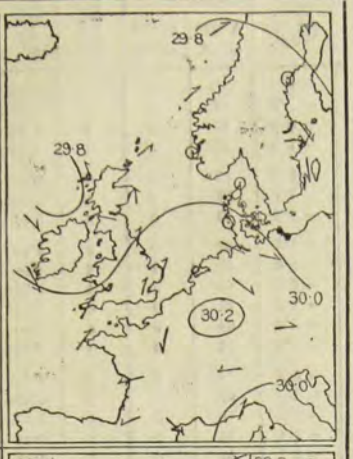
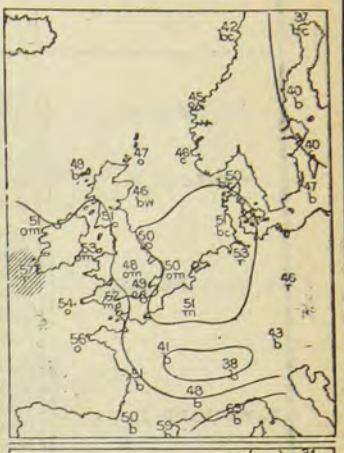
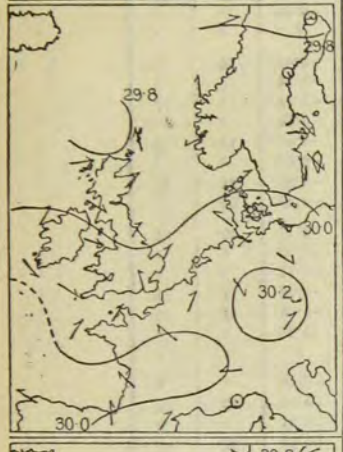
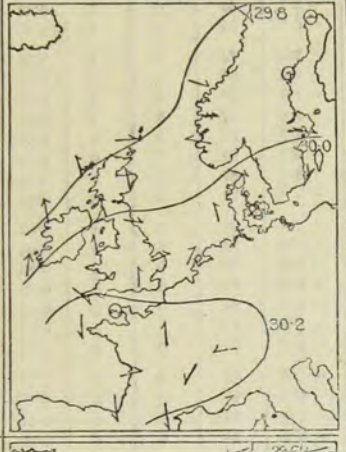
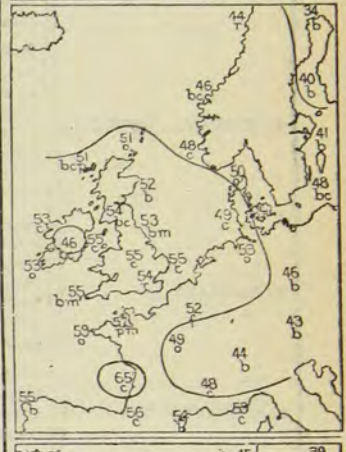
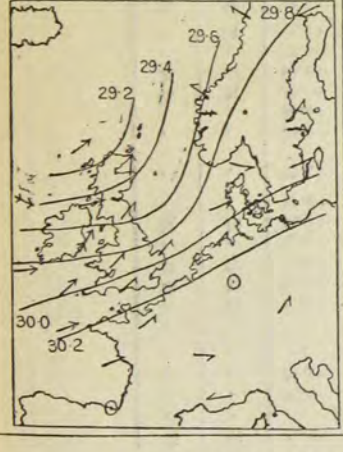
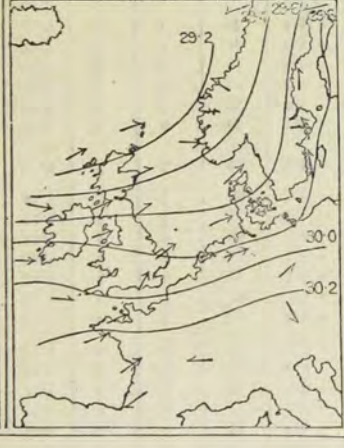
Temperature fallen in Germany and France, but risen slightly elsewhere; readings over our Islands ranging from 53° at Jersey to 44° in the Shetlands. Maxima again below 60° generally and below 55° at many of the northern stations.

Wind light from South-West on our extreme north-west coasts and moderate from North-West over Great Britain, but fresh from North-East over the Bay of Biscay. Subsequently backing to the Southward in the west of Ireland.

Sea moderate to smooth.

Barometer falling on our western and northern coasts and also in Scandinavia, but rising elsewhere. Pressure highest over our south-west coasts, with areas of low readings over the Gulf of Bothnia and the Gulf of Genoa. Slight falling taking place later in most parts of our Islands.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, September 25.** *Weather* fine in Scandinavia, Denmark, France, and the east of Scotland, but cloudy and overcast elsewhere, with rain in the south of Ireland and also in North Germany. Rain falling later in nearly all parts of the United Kingdom. *Temperature* fallen in the southern parts of France and Germany, but risen in most other localities; readings over our Islands ranging from 57° at Valencia to 44° at Nairn. *Wind* moderate or fresh from the Southward on our western coasts and light South-Westerly in the East, but light from North-West or North at most of the Continental stations. Subsequently veering to North-West in Ireland. *Sea* rather rough at Valencia, but moderate to smooth elsewhere. *Barometer* falling in all parts of our Islands, but rising on the Continent. Pressure highest in the west of France and area of low readings appearing off our own western coasts. Two or three small shallow depressions advancing over our Islands later, and barometer (in their rear) rising again in the west of Ireland.	
		**Sunday, September 26.** *Weather* rainy in the south-east of England, and showery on our extreme north-west coasts, but fair in most other parts of western Europe. Rain falling in west of Ireland later, and lightning seen at several western stations. *Temperature* fallen in the south of Ireland, but risen elsewhere; readings over our Islands ranging from 57° at Dungeness and Jersey to 46° at Parsonstown. *Wind* Westerly or North-Westerly on our northern and also on our south-western coasts, but South-Westerly or Southerly in the east, and variable on the eastern shores of the North Sea. Subsequently backing to South in Ireland and increasing to gale. *Sea* moderate to smooth. *Barometer* falling in the eastern parts of Great Britain, but rising elsewhere. Areas of high pressure lying over France and Germany, with shallow depressions over the east of our Islands. Brisk fall taking place later on our extreme western coasts.	
		**Monday, September 27.** *Weather* dull, squally, and showery over the British Islands, but fair at most of the continental stations. Decided improvement taking place later on our western coasts. Lightning seen in Scotland at night. *Temperature* risen generally; readings over our Islands ranging from 60° at Falmouth and Dungeness to 50° in the Shetlands. *Wind* South-Westerly or Southerly; strong to a gale on many parts of our coasts. Subsequently veering to the westward in the west and north, and moderating somewhat. *Sea* rough on all our western coasts. *Barometer* rising briskly in Ireland, but falling over Great Britain and the eastern shores of the North Sea. Anticyclone lying over the southern parts of France and Germany, with a large and rather deep depression off the north-west of Scotland. Depression subsequently moving north-eastwards, and barometer rising on our northern coasts.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 153 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	56	39	52·3	42·4	47·1	− 7·7	36	0	6	1·05	+0·18	*	*
	Stornoway	58	42	53·3	44·6	48·7	− 0·9	47	0	7	1·09	+0·07	24	29
	Wick	58	40	53·9	44·4	48·9	− 1·2	48	0	6	0·35	−0·29	*	*
1. SCOTLAND, E.	Nairn	61	36	54·7	42·1	48·1	− 2·9	43	0	5	0·45	−0·18	*	*
	Aberdeen	64	40	56·7	44·3	50·2	− 0·7	57	0	4	0·18	−0·55	29	35
	Leith	65	41	57·1	46·1	51·3	− 0·8	65	0	3	0·37	−0·20	*	*
2. ENGLAND, N.E.	Alnwick Castle	61	44	54·1	46·7	50·2	− 1·3	57	0	5	0·29	−0·41	*	*
	Durham	64	41	56·3	44·6	50·1	− 2·8	57	0	4	0·20	−0·40	11	13
	Shields	64	43	56·4	46·7	51·3	− 0·7	65	0	4	0·31	−0·29	*	*
	Scarborough ℳ	63	46	56·7	48·0	52·1	− 1·3	71	0	6	0·52	−0·18	*	*
	York	64	39	57·9	45·1	51·2	− 2·3	64	0	5	0·40	−0·28	14	17
	Spurn Head	63	47	57·0	49·0	52·8	− 1·0	76	0	6	0·24	?	*	*
3. ENGLAND, E.	Hillington ℳ	61	42	58·1	44·7	51·1	− 3·3	64	0	6	0·32	−0·38	11	13
	Yarmouth	63	47	60·9	51·3	55·9	+ 0·8	97	0	6	0·29	−0·43	*	*
	Geldeston	62	44	58·8	46·7	52·5	− 2·5	74	0	3	0·38	−0·27	16	19
	Cambridge	65	41	60·1	45·6	52·5	− 3·4	74	0	3	0·18	−0·40	16	19
	Rothamsted	62	43	58·8	45·5	51·8	− 3·1	69	0	3	0·42	−0·28	*	*
	Ingatestone	64	42	59·6	46·5	52·7	− 2·7	75	0	2	0·35	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	64	40	58·6	45·6	51·8	− 2·3	69	0	5	0·31	−0·34	14	17
	Loughborough	65	39	59·0	45·0	51·7	− 2·2	68	0	2	0·25	−0·46	*	*
	Leicester	66	42	58·8	45·7	51·9	− 1·9	69	0	3	0·37	−0·33	14	17
	Cheadle ℳ	61	39	55·2	44·1	49·4	− 3·2	52	0	3	0·55	−0·30	*	*
	Churchstoke ℳ	63	38	56·0	43·9	49·7	− 3·7	54	0	2	0·43	−0·31	18	22
	Hereford ℳ	66	38	58·9	43·9	51·0	− 2·9	63	0	2	0·33	−0·39	*	*
	Cirencester	63	42	57·9	45·3	51·3	− 3·1	65	0	3	0·70	−0·11	21	25
	Oxford	65	42	59·7	46·9	53·0	− 1·8	77	0	2	0·41	−0·26	21	25
5. ENGLAND, S.	London†	67	45	61·3	48·9	54·8	− 1·3	90	0	4	0·47	−0·13	10	12
	Strathfield Turgiss ℳ	67	39	63·0	44·7	53·4	− 1·8	80	0	4	0·64	−0·02	*	*
	Dungeness	65	39	61·0	46·3	53·3	− 2·6	79	0	5	0·58	−0·11	*	*
	Hastings (St. Leonard's)	64	44	60·3	49·7	54·8	− 0·3	90	0	3	0·47	−0·28	17	20
	Southampton	70	41	62·2	47·8	54·7	− 0·5	89	0	3	0·54	−0·23	15	18
	Hurst Castle	67	40	61·0	48·0	54·2	− 1·7	85	0	4	0·52	−0·25	*	*
	Stowell ℳ	63	38	58·4	45·1	51·4	− 3·3	66	0	3	0·62	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	66	41	56·3	46·3	51·1	− 1·2	64	0	2	1·26	−6·49	*	*
	Glasgow	58	38	54·4	45·5	49·7	− 2·5	54	0	3	0·75	−0·22	20	24
	Ardrossan	61	41	56·3	46·1	51·0	− 1·0	63	0	4	0·41	−0·51	*	*
	Douglas (Isle of Man)	60	38	56·3	46·6	51·2	− 0·9	64	0	3	1·11	+0·17	21	25
7. ENGLAND, N.W.	Newton Reigny (Penrith)	59	35	53·6	42·6	47·8	− 3·8	41	0	3	0·91	+0·10	12	14
	Barrow-in-Furness	59	43	55·9	47·7	51·6	− 2·2	67	0	4	1·24	+0·32	*	*
	Stonyhurst	58	40	54·9	44·2	49·3	− 3·3	51	0	3	1·80	+0·60	22	27
	Blackpool ℳ	59	36	56·3	45·5	50·6	− 3·1	60	0	3	1·32	+0·37	17	20
	Manchester	59	39	55·0	45·4	50·0	− 3·6	56	0	3	1·46	+0·48	*	*
	Liverpool Obsy (Bidston)	63	42	56·9	47·4	51·9	− 3·0	69	0	4	0·80	−0·02	*	*
	Llandudno ℳ	60	45	57·0	49·9	53·3	− 2·5	79	0	3	1·30	+0·45	*	*
	Holyhead	67	38	60·0	42·7	50·9	− 3·6	62	0	3	1·65	+0·45	*	*
8. ENGLAND, S.W.	Llandovery	62	44	57·9	49·0	53·2	− 0·6	78	0	3	1·14	+0·22	30	36
	Pembroke	61	44	57·4	46·6	51·7	− 2·7	68	0	3	1·57	+0·32	*	*
	Arlington (N. Devon)	66	34	61·0	45·2	52·7	− 2·7	75	0	3	0·47	−0·44	22	27
	Cullompton ℳ	61	45	58·6	50·6	54·4	− 2·1	87	0	3	0·97	−0·28	22	27
	Falmouth	65	46	60·4	49·7	54·8	− 1·7	90	0	3	0·50	−0·45	23	28
	Plymouth	64	43	59·1	49·0	53·8	− 0·5	83	0	4	1·32	?	*	*
	Prawle Point	59	43	54·6	47·7	51·0	− 0·2	63	0	5	0·48	?	*	*
9. IRELAND, N.	Malin Head	63	41	59·6	45·4	52·2	0·0	71	0	5	0·46	−0·45	*	*
	Londonderry	61	45	57·4	48·3	52·6	− 0·7	74	0	5	0·51	−0·54	*	*
	Mullaghmore	59	45	57·9	48·6	53·0	− 0·1	77	0	4	0·63	?	*	*
	Belmullet	61	34	57·4	42·1	49·4	− 3·9	52	0	4	0·49	−0·29	20	24
	Markree Castle	59	31	56·4	41·5	48·6	− 4·4	48	1	3	0·69	?	*	*
10. IRELAND, S.	Brookeborough	60	36	56·6	43·8	49·9	− 3·2	55	0	5	0·56	−0·17	19	23
	Armagh	63	43	56·6	47·4	51·8	− 0·8	69	0	3	0·67	−0·08	*	*
	Donaghadee	60	34	56·4	42·6	49·2	− 4·9	50	0	4	0·92	+0·13	*	*
	Edgeworthstown	61	39	56·8	47·1	51·8	− 1·7	69	0	4	0·69	+0·09	19	23
	Dublin	60	32	56·6	40·4	48·1	− 6·2	43	0	4	1·03	+0·24	16	19
	Parsonstown	63	34	58·1	43·1	50·2	− 4·2	57	0	3	0·90	+0·16	*	*
	Kilkenny	61	38	58·6	45·4	51·7	− 2·7	68	0	4	1·13	+0·21	*	*
	Waterford	61	43	59·1	47·3	52·9	− 1·9	76	0	3	1·18	+0·18	*	*
	Roche's Point	63	42	60·6	48·9	54·5	− 0·9	88	0	3	1·03	−0·14	37	45
	Valencia	61	33	58·7	44·2	51·1	− 3·9	64	0	3	1·52	?	*	*
	Killarney	62	38	58·0	47·4	52·5	− 2·3	74	0	4	0·88	?	*	*
	Foynes													
CHANNEL ISLANDS	Scilly (St. Mary's)	62	50	59·7	53·0	55·2	− 1·5	99	0	4	0·68	−0·20	*	*
	Jersey (Noirmont)	68	51	62·1	53·9	57·8	− 0·5	111	0	4	0·64	−0·21	28	33

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 40.] *New Series.* WEEK ENDING MONDAY, 4TH OCTOBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 160.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	63	41	55·1	46·4	50·7	2 above.	61	0	1463	−237	669	+157
	1. SCOTLAND, EAST	68	33	60·0	47·0	53·2	3 above.	78	0	2030	−153	740	+195
	2. ENGLAND, N.E.	69	44	62·1	50·0	55·9	4 above.	97	0	2199	−143	697	+215
	3. ENGLAND, EAST	80	39	67·7	49·8	58·5	5 above.	116	0	2645	− 51	750	+242
	4. MIDLAND COUNTIES	77	38	66·4	49·8	57·9	6 above.	111	0	2608	− 62	721	+213
	5. ENGLAND, SOUTH	80	39	67·1	53·2	60·0	6 above.	126	0	2874	− 37	590	+216
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	64	42	59·1	50·1	54·5	3 above.	88	0	1990	−300	579	+181
	7. ENGLAND, N.W.*	70	43	62·3	51·7	56·8	6 above.	104	0	2286*	−161	612	+229
	8. ENGLAND, S.W.	75	44	63·6	53·5	58·4	4 above.	115	0	2628	−140	490	+256
	9. IRELAND, NORTH	68	34	60·5	49·5	54·9	3 above.	90	0	2173	−201	492	+142
	10. IRELAND, SOUTH	67	35	62·0	51·9	56·8	4 above.	104	0	2523	−157	401	+162
	— CHANNEL ISLANDS†	71	54	67·1	56·7	61·8	5 above.	139	0	2927	− 69	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 160.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	7	2 less.	194	+24	25·6	− 0·2	21	27	1142	+ 58	30	+ 1
	1. SCOTLAND, EAST	3	8	2 more.	147	+ 1	18·4	− 1·7	20	25	1221	− 14	33	0
	2. ENGLAND, N.E.	4	9	3 more.	147	+ 7	20·1	− 0·5	26	33	995	−142	29	− 2
	3. ENGLAND, EAST	1	1	6 less.	136	− 9	16·8	− 3·6	37	47	1326	− 52	36	− 2
	4. MIDLAND COUNTIES	4	8	1 more.	142	+ 2	23·0	+ 0·8	26	32	1108	−122	30	− 3
	5. ENGLAND, SOUTH	3	4	4 less.	131	− 4	19·1	− 1·5	36	45	1328	+ 8	36	+ 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	11	0 (average).	158	0	31·8	+ 2·0	12	15	1049	−146	28	− 4
	7. ENGLAND, N.W.*	5	13	3 more.	150	+ 3	29·8*	+ 3·9	20	25	1085*	−116	29	− 4
	8. ENGLAND, S.W.	6	14	3 more.	149	− 4	28·9	− 3·9	27	33	1262	−167	35	− 4
	9. IRELAND, NORTH	5	13	5 more.	168	− 7	28·5*	+ 0·5	12	15	927	−177	25	− 5
	10. IRELAND, SOUTH	6	11	2 more.	164	+ 1	31·6	+ 1·7	11	13	1079	−187	29	− 6
	— CHANNEL ISLANDS†	4	5	4 less.	170	+ 5	22·8	− 0·9	39	48	1589	− 98	44	− 2

General Remarks.

Weather has been unsettled and rainy over the more western and northern parts of the Kingdom, but in the south and south-east of England it has been very fine and dry. Thunder and lightning occurred in some localities on October 1st.

Temperature has been above the mean in all districts, the excess ranging from 2° in "Scotland, N." to 5° or 6° over the greater part of England. The absolute maxima, which were recorded on October 4th, were generally abnormally high for the time of year. In "England, E." (at Cambridge) and in "England, S.W." to 75°, and in "England, S.W." to 75°, while in most other districts they varied between 67° and 71°. In the neighbourhood of London the maximum has not been so high for the season since October 4th in the year 1859. The lowest of the minima, which were registered on irregular dates, varied from 33° in "Scotland, E.", 34° in "Ireland, N.", and 35° in "Ireland, S.", to 44° in "England, N.E." and "England, S.W." and to 54° in the "Channel Islands". On most occasions the minima were much higher than these readings,—thus at Killarney and Foynes during the night of September 28—29, and at Parsonstown and Liverpool on the night following, the thermometer did not fall below 60°, while minima between 55° and 59° were very numerous throughout the period.

Rainfall has been less than the mean in "Scotland, N.", "England, E.", "England, S.", and the "Channel Islands", and about equal to it in "Scotland, W.", but elsewhere it has been rather more than the normal value.

Bright sunshine has been more prevalent over England than it was last week, but less so in Ireland and Scotland. The percentages of the possible amount of duration ranged from between 13 and 15 in Ireland and the west of Scotland, to 45 in "England, S.", 47 in "England, E.", and 48 in the "Channel Islands".

Depressions observed.—During the earlier part of this period the barometer was highest over France, while depressions travelled north-eastwards to the northward of our Islands and over Scandinavia. Under these conditions strong South-Westerly to Westerly winds were experienced on our coasts, and in the west and north they occasionally increased to the force of a gale. On October 1st some subsidiary disturbances had appeared over the Bay of Biscay and our south-west coasts, causing the wind over England to back to the South-Eastward. By October 3rd, however, the distribution of pressure had undergone considerable modification; the subsidiary depressions had moved north-eastwards and disappeared, an anticyclone, which subsequently travelled northwards, had been formed over the North Sea, the wind over the United Kingdom blew moderately from the South-Eastward or Eastward, and depressions began to approach the south-western parts of our area.

* These values have been altered owing to the receipt of some arrears of observations.
† The values in this district are liable to alteration owing to the non-arrival of the Reports from Scilly.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

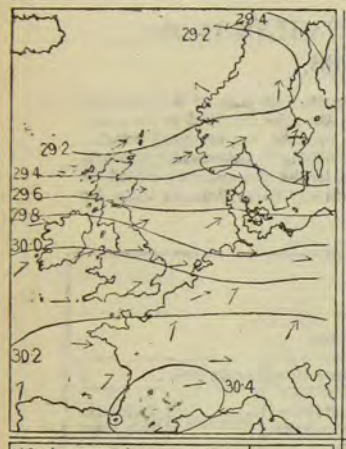
Weather

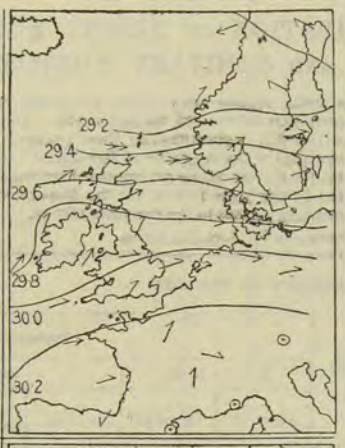
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, September 28.

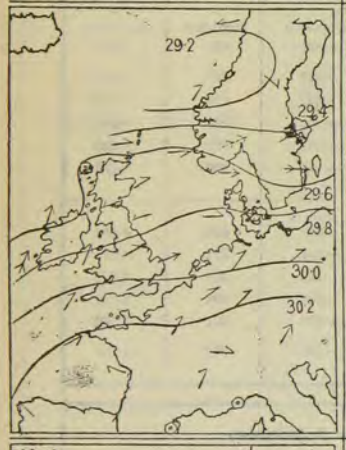
Weather rainy in Sweden and Germany, and showery at some of our own northern stations, but fair or fine elsewhere. Rain falling later in most parts of the Kingdom—heavily in the west.

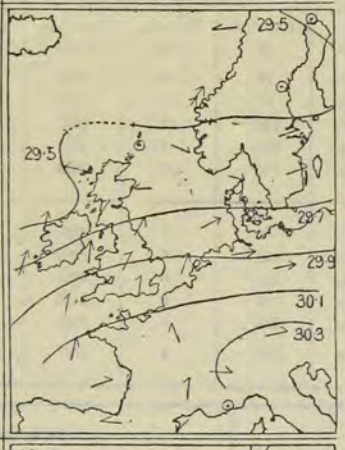
Temperature fallen in our Islands, but risen at most of the Continental stations; readings over the United Kingdom ranging from 59° at Jersey to 49° at Donaghadee.

Wind South-Westerly or Westerly in nearly all parts of Western Europe; strong in force on all our more northern coasts, but moderate or fresh in the south. Subsequently increasing to strong gale in the north of Scotland.

Sea rough or rather so on our western and extreme northern coasts, but moderate to slight elsewhere.

Barometer falling in Scandinavia, Denmark, and Germany, but rising in our Islands and France. Anticyclone lying over the south of France, with a large area of low pressure to the northward of the United Kingdom. Depression subsequently approaching the west of Ireland, and barometer falling on all our west coasts.





Wednesday, September 29.

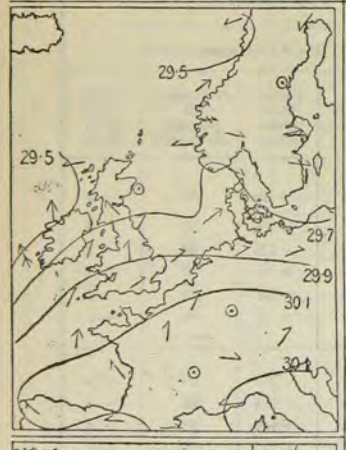
Weather rainy over the northern parts of Ireland and England, and dull in our Islands generally, but fair at most of the Continental stations. Rain falling later on our western coasts.

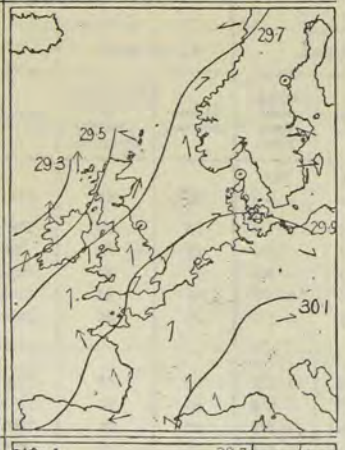
Temperature fallen a little in the north of our Islands and also in the west of France, but risen elsewhere—quickly over England; readings over the United Kingdom ranging from 63° at Cambridge to 48° at Stornoway and Leith.

Wind fresh or strong South-Westerly or Westerly generally, with a gale in the west of Ireland, but variable in Scotland and calm in the south of France. Light Easterly breezes subsequently appearing in Scotland.

Sea high at Valencia and Pembroke, and rough on our west and south-west coasts generally.

Barometer rising in Scotland and also on the eastern shores of the North Sea, but falling elsewhere. Anticyclone lying over the south of France, with a large area of low pressure over the north of Norway and a depression off our extreme north-west coasts. Fall extending to Scotland later.





Thursday, September 30.

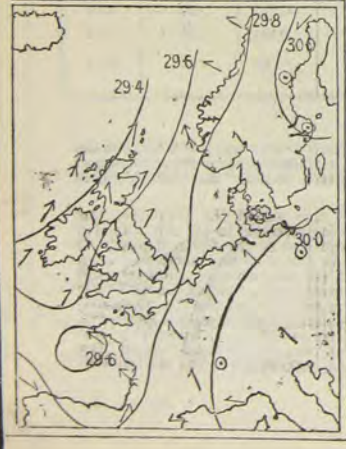
Weather dull, misty, and unsettled in the west and north of our Islands, but fine at our eastern and most of the Continental stations. Slight rain falling in the west and north later.

Temperature risen in Scotland and the west of France, but fallen elsewhere; readings over our Islands ranging from 63° at Leith, Mullaghmore, and Liverpool to 49° in the Shetlands.

Wind light from South-East in Scotland and the south of France, and from East in the north of Scandinavia, but fresh to strong from South or South-West elsewhere, with a gale in the west of Ireland. Subsequently backing to South-East at some of the English stations.

Sea rough on the more exposed parts of our western coasts.

Barometer falling at all but the Scandinavian and Scotch stations. Pressure highest in South Germany and the east of France, with a large depression off the west of our Islands. Depression subsequently moving slowly northwards, and barometer rising slightly at Valencia.



Friday, October 1.

Weather rainy in the west of England and dull in Scandinavia, Denmark, and the south of Ireland, but fair or fine elsewhere. Thunderstorms and heavy rain occurring later in many parts of England.

Temperature fallen in Germany and the greater part of England and Ireland, but risen elsewhere; readings over our Islands ranging from 63° at Jersey, Hurst Castle, and Dungeness, to 48° at Parsonstown. Rapid rise taking place over England later, and thermometer reaching 78° in London and 80° at Cambridge.

Wind South-Westerly or Southerly in Ireland and Scotland, with a gale at Stornoway, South-Easterly elsewhere, with strong winds or gales in the west of France. Subsequently veering to West over the Bay of Biscay.

Sea rough at some of our western and northern stations, but moderate to smooth elsewhere.

Barometer falling at all but the Scandinavian and Danish stations, quickly in the west of France. Pressure highest over Northern and Central Europe, with a depression off the north-west of our Irelands and another over the Bay of Biscay. Latter disturbance subsequently moving north-eastwards to the south of England.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

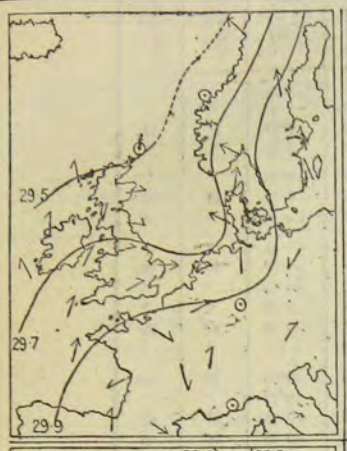
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Saturday, October 2.

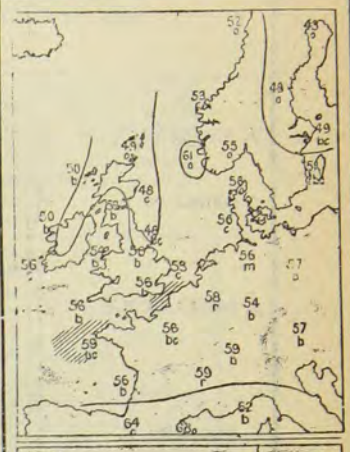
Weather dull in Scandinavia and the extreme north of Scotland, but fine elsewhere. Rain falling later at many of our western stations.

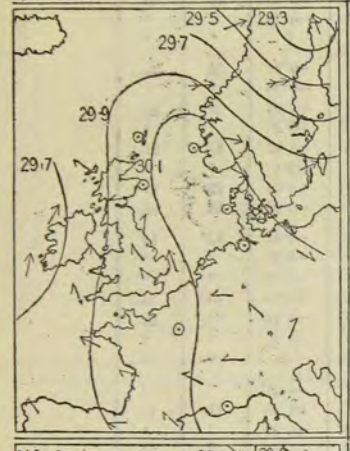
Temperature risen a few degrees in Scandinavia, but fallen elsewhere; readings over our Islands ranging from 58° at Roche's Point, Prawle Point, and Jersey, to 47° at Nairn and Parsonstown. Maximum in London 10° lower than on previous day.

Wind strong from South-East on the eastern shores of the North Sea, and fresh from South-West or West in the east and south of England, but light from South on our west coasts. Subsequently increasing to gale from South-East and South in the south of Ireland.

Sea rather rough in the Straits of Dover and also at Brest, but moderate to smooth elsewhere.

Barometer rising at all but the Scandinavian and Danish Stations. Pressure highest over the Baltic and lowest to the westward and northward of our Islands, but shallow depression lying over the North Sea. Rather deep disturbance approaching Ireland later, and barometer falling in south-west.





Sunday, October 3.

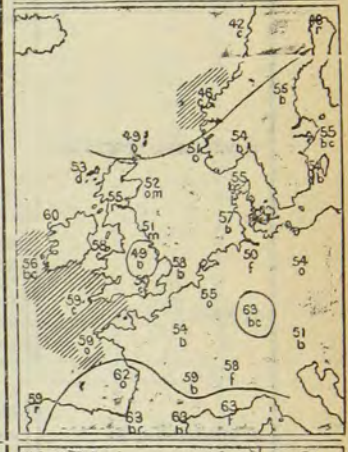
Weather dull and rainy at several of our western and northern stations, but fair or fine elsewhere.

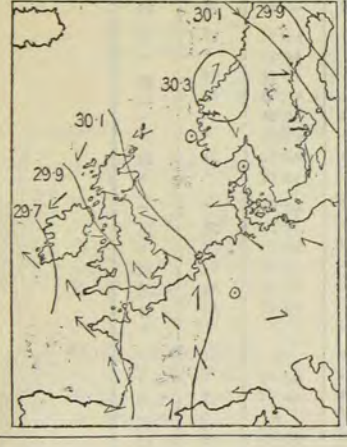
Temperature fallen a little in Norway and Central England, but risen elsewhere; readings over our Islands ranging from 60° at Mullaghmore and 59° at several of our southern stations to 48° at Loughborough.

Wind strong to a gale from West or South-West in the north of Scandinavia, but light to fresh from the South-Eastward elsewhere.

Sea rather rough on our south-west coasts, but moderate to smooth in all other localities.

Barometer fallen quickly in Scandinavia and slightly in Spain and the south-west of France, but rising elsewhere. Anticyclone lying over the North Sea, with a deep depression over the north of Sweden and an area of relatively low pressure to the westward of our Islands. Slight fall taking place over England later.





Monday, October 4.

Weather rainy in the north of England, and dull on our south-west coasts, but fair or fine elsewhere. Rain falling later at several of our western and northern stations.

Temperature fallen several degrees in Sweden and slightly in the north-west of our Islands, but risen elsewhere, readings over our Islands ranging from 64° at Jersey and Dungeness to 50° at Sumburgh Head and Nairn. Subsequently rising to 77° at Loughborough and to 80° in London and at Cambridge.

Wind moderate North-Westerly in Sweden, but South-Easterly or Easterly elsewhere; strong at some of the Irish stations.

Sea rather rough at Valencia, but moderate to smooth elsewhere.

Barometer rising in Scandinavia, Germany, and the north of our Islands, but falling in most other localities. Anticyclone lying over Norway, with area of low pressure to the south-westward of the United Kingdom. Slight fall taking place later in most parts of our Islands.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 157 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	•				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	56	45	53·6	46·7	50·1	+ 1·2	57	0	6	0·53	−0·41	•	•
	Stornoway	63	43	56·3	46·9	51·5	+ 3·1	67	0	6	1·10	+0·04	21	27
	Wick	59	41	55·4	45·6	50·4	+ 1·5	59	0	5	0·43	−0·22	•	•
1. SCOTLAND, E.	Nairn	64	33	58·6	44·1	51·1	+ 1·2	64	0	4	0·71	+0·10	•	•
	Aberdeen	68	45	59·1	47·9	53·3	+ 3·6	79	0	3	0·60	−0·11	20	25
	Leith	68	47	62·4	48·9	55·2	+ 4·5	92	0	3	1·09	+0·55	•	•
2. ENGLAND, N.E.	Alnwick Castle	64	44	58·9	49·4	54·0	+ 3·6	84	0	5	2·23	+1·55	•	•
	Durham	67	46	61·9	48·9	55·2	+ 3·8	92	0	4	1·39	+0·77	26	33
	Shields	68	46	61·0	49·3	55·0	+ 4·1	91	0	4	1·11	+0·53	•	•
	Scarborough ℜ	69	47	62·9	51·1	56·9	+ 4·8	104	0	3	0·24	−0·47	•	•
	York	69	44	66·0	49·4	57·2	+ 5·0	106	0	5	0·34	−0·31	26	33
	Spurn Head	66	48	62·0	52·1	56·9	+ 4·5	104	0	2	0·10	?	•	•
3. ENGLAND, E.	Hillington ℜ	77	43	67·6	48·6	57·8	+ 5·5	111	0	2	0·07	−0·60	32	40
	Yarmouth	71	47	64·6	51·9	58·1	+ 4·2	113	0	0	—	−0·70	•	•
	Geldeston	72	43	67·0	50·8	58·7	+ 4·9	117	0	0	‖0·01	−0·63	43	34
	Cambridge	80	43	70·3	48·1	58·9	+ 4·6	118	0	1	0·02	−0·55	37	46
	Rothamsted	76	39	68·6	48·7	58·4	+ 5·0	115	0	3	0·20	−0·50	•	•
	Ingatestone	77	47	68·3	50·4	59·1	+ 5·1	120	0	1	0·01	?	•	•
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	71	38	67·3	48·4	57·6	+ 5·0	109	0	3	0·43	−0·23	22	28
	Loughborough	77	43	68·4	49·3	58·6	+ 6·1	116	0	3	0·50	−0·20	•	•
	Leicester	77	45	68·6	50·9	59·5	+ 7·0	123	0	3	0·72	+0·05	26	33
	Cheadle ℜ	68	44	62·9	49·1	55·8	+ 4·5	97	0	5	1·07	+0·22	•	•
	Churchstoke ℜ	70	43	63·2	50·9	56·9	+ 4·7	104	0	4	1·84	+1·07	25	31
	Hereford ℜ	74	43	67·1	50·4	58·5	+ 5·8	116	0	4	0·79	+0·10	•	•
	Cirencester	72	43	65·6	48·3	56·7	+ 4·7	103	0	3	0·53	−0·24	23	29
	Oxford	75	45	67·9	51·1	59·3	+ 6·0	121	0	3	0·43	−0·22	33	41
5. ENGLAND, S.	London†	80	48	71·4	50·1	60·4	+ 5·6	129	0	1	0·04	−0·57	32	40
	Strathfield Turgiss ℜ	75	39	69·2	48·9	58·8	+ 4·8	118	0	1	0·52	−0·13	•	•
	Dungeness	70	53	66·3	56·3	61·2	+ 6·5	134	0	1	0·03	−0·67	•	•
	Hastings (St. Leonard's)	71	50	66·0	55·2	60·4	+ 5·7	129	0	2	0·04	−0·73	40	50
	Southampton	71	49	67·7	53·9	60·6	+ 6·6	130	0	3	0·65	−0·11	36	45
	Hurst Castle	70	53	65·3	55·6	60·3	+ 5·4	128	0	6	0·71	−0·04	•	•
	Stowell ℜ	67	45	64·1	?52·7	?58·2	?+ 4·5	?113	0	5	0·43	?	•	•
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	64	46	59·4	50·0	54·6	+ 3·5	88	0	7	1·49	−0·26	•	•
	Glasgow	64	46	58·6	50·3	54·3	+ 3·4	86	0	5	1·31	+0·35	11	14
	Ardrossan	64	42	58·0	48·1	52·9	+ 2·0	76	0	5	1·04	+0·09	•	•
	Douglas (Isle of Man)	63	47	60·2	52·0	56·0	+ 4·6	98	0	4	0·52	−0·43	13	16
7. ENGLAND, N.W.	Newton Reigny (Penrith)	64	43	61·1	49·5	55·1	+ 4·8	92	0	6	2·05	+1·24	17	21
	Barrow-in-Furness	65	47	60·6	52·7	56·5	+ 5·6	102	0	5	1·27	+0·34	•	•
	Stonyhurst	65	44	61·1	50·2	55·5	+ 6·2	95	0	5	1·41	+0·18	23	29
	Blackpool ℜ	68	49	62·5	52·9	57·6	+ 6·2	109	0	5	1·06	+0·10	20	25
	Manchester	70	46	64·2	51·0	57·4	+ 7·4	108	0	5	1·34	+0·36	•	•
	Liverpool Obsy (Bidston)	68	48	63·3	52·3	57·6	+ 5·7	109	0	4	1·09	+0·27	•	•
	Llandudno ℜ	67	47	63·4	51·3	57·2	+ 4·8	105	0	3	1·19	+0·34	18	23
	Holyhead	69	48	62·0	53·7	57·7	+ 5·2	110	0	3	0·78	−0·14	•	•
8. ENGLAND, S.W.	Llandovery	75	44	65·4	54·1	59·6	+ 6·1	123	0	6	2·12	+0·88	•	•
	Pembroke	66	50	61·3	55·1	58·1	+ 4·7	113	0	5	0·65	−0·28	22	28
	Arlington (N. Devon)	68	44	63·4	52·1	57·6	+.4·3	109	0	5	2·00	+0·70	•	•
	Cullompton ℜ	70	44	66·3	51·8	58·8	+ 4·5	118	0	5	0·88	−0·02	24	30
	Falmouth	65	47	62·6	53·5	57·9	+ 2·5	111	0	7	1·81	+0·56	31	38
	Plymouth	69	49	63·8	53·9	58·7	+ 3·3	117	0	7	1·42	+0·52	29	36
	Prawle Point	65	47	62·4	54·1	58·1	+ 4·5	113	0	5	0·66	?	•	•
9. IRELAND, N.	Malin Head	63	42	59·3	48·6	53·8	+ 3·4	83	0	6	1·91	?	•	•
	Londonderry	66	42	60·6	48·8	54·5	+ 3·4	88	0	5	1·00	+0·05	•	•
	Mullaghmore	65	49	62·1	52·3	57·1	+ 5·2	106	0	6	1·43	+0·44	•	•
	Belmullet	64	50	60·3	52·7	56·4	+ 4·0	101	0	7	1·27	?	•	•
	Markree Castle	65	34	60·8	47·6	54·0	+ 1·3	84	0	6	2·08	+1·25	12	15
	Brookeborough	68	42	60·5	49·0	54·6	+ 3·1	88	0	5	1·35	?	•	•
	Armagh	65	43	60·2	49·9	54·9	+ 3·1	90	0	4	0·75	+0·05	12	15
	Donaghadee	64	42	60·0	48·6	54·1	+ 2·3	85	0	4	0·78	+0·03	•	•
	Edgeworthstown	64	39	61·0	48·1	54·4	+ 2·2	87	0	5	1·11	+0·36	•	•
10. IRELAND, S.	Dublin	67	46	61·8	52·8	57·2	+ 4·8	106	0	4	0·59	−0·06	7	9
	Parsonstown	65	41	61·7	49·3	55·3	+ 2·7	93	0	5	0·74	−0·03	9	11
	Kilkenny	67	35	63·0	50·1	56·4	+ 3·3	101	0	6	0·89	+0·16	•	•
	Waterford	64	40	61·3	50·9	56·0	+ 2·6	98	0	7	1·03	+0·11	•	•
	Roche's Point	62	46	60·9	52·7	56·7	+ 3·1	103	0	6	1·32	+0·33	•	•
	Valencia	65	48	62·1	54·0	57·9	+ 3·2	111	0	6	1·73	+0·51	16	20
	Killarney	66	45	62·3	52·8	57·4	+ 3·5	108	0	7	1·89	?	•	•
	Foynes	67	44	?63·0	?52·7	?57·7	?+ 4·4	?110	0	5	0·67	?	•	•
CHANNEL ISLANDS	Scilly (St. Mary's)												•	•
	Jersey (Noirmont)	71	54	67·1	56·7	61·8	+ 4·7	139	0	4	0·51	−0·40	39	48

Stations marked ℜ are in connection with the Royal Meteorological Society.

• An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

‖ Dew.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 41.] *New Series.* WEEK ENDING MONDAY, 11TH OCTOBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 164.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	38	55·8	47·8	51·6	4 above.	67	0	1530	−213	669	+152
	1. SCOTLAND, EAST	66	37	58·6	47·1	52·7	4 above.	75	0	2105	−126	740	+189
	2. ENGLAND, N.E.	64	39	57·7	48·9	53·1	3 above.	78	0	2277	−116	697	+212
	3. ENGLAND, EAST	80	41	62·7	49·3	55·9	4 above.	97	0	2742	−109	750	+240
	4. MIDLAND COUNTIES	78	35	61·5	48·3	54·7	4 above.	89	0	2697	− 23	721	+209
	5. ENGLAND, SOUTH	79	44	63·8	51·3	57·4	5 above.	108	0	2982 *	+ 7	590	+214
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	68	38	58·5	48·9	53·6	4 above.	81	0	2071	−270	579	+177
	7. ENGLAND, N.W.*†	72	37	59·9	49·6	54·6	3 above.	88	0	2374	−126	612	+228
	8. ENGLAND, S.W.	71	36	61·6	49·5	55·4	2 above.	94	0	2722	−112	490	+256
	9. IRELAND, NORTH	68	33	58·3	46·9	52·4	2 above.	73	0	2246	−176	492	+140
	10. IRELAND, SOUTH	66	35	60·3	47·8	53·8	2 above.	83	0	2606	−131	401	+161
	— CHANNEL ISLANDS	66	50	62·4	54·7	58·4	2 above.	115	0	3036 *	− 45	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 164.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	7	2 less.	199	+24	26·3	− 0·4	15	20	1157	+ 50	30	+ 1
	1. SCOTLAND, EAST	4	3	3 less.	151	+ 1	18·7	− 2·0	17	23	1238	− 16	33	0
	2. ENGLAND, N.E.	4	6	1 less.	151	+ 7	20·7	− 0·6	15	20	1010	−147	27	− 4
	3. ENGLAND, EAST	5	6	0 (average).	141	− 6	17·4	− 3·7	27	35	1353	− 44	36	− 1
	4. MIDLAND COUNTIES	5	9	2 more.	147	+ 3	23·9	+ 1·0	18	24	1126	−124	30	− 3
	5. ENGLAND, SOUTH	6	11	4 more.	137	− 2	20·2	− 1·1	27	35	1355	+ 12	36	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	17	4 more.	163	+ 1	33·5	+ 2·8	17	22	1066	−150	28	− 4
	7. ENGLAND, N.W.*†	6	12	3 more.	156	+ 5	31·0	+ 4·2	18	23	1103	−116	29	− 3
	8. ENGLAND, S.W.	6	17	6 more.	155	− 2	30·6	− 2·4	25	32	1287	−164	35	− 4
	9. IRELAND, NORTH	5	13	5 more.	173	− 7	29·8	+ 1·0	8	11	935	−190	25	− 5
	10. IRELAND, SOUTH	4	13	5 more.	168	+ 1	32·9	+ 2·1	19	25	1098	−196	29	− 5
	— CHANNEL ISLANDS	5	22	12 more.	177 *	+ 7	25·1*	+ 0·4	32	41	1621	− 96	44	− 2

General Remarks.

Weather was generally fair at the commencement of the period, but soon became dull and unsettled, with frequent falls of rain. In many parts of the Kingdom thunderstorms occurred, that experienced over the north of England and south of Scotland on the 6th, being unusually severe.

Temperature has continued above the mean in all districts, the excess ranging from 2° in Ireland, the south-west of England, and the "Channel Islands", to 4° in Scotland and over central and eastern England, and to 5° in "England, S." The absolute maxima, which were recorded on the 5th, were again very high for the season, varying from 64° in "England, N.E." and from between 66° and 68° in Ireland, Scotland, and the "Channel Islands", to 78° in the "Midland Counties", 79° in "England, S.", and 80° in "England, E." The lowest of the minima, which were generally registered either on the 10th or 11th, varied from 33° in "Ireland, N." and 35° in "Ireland, S." and the "Midland Counties", to 44° in "England, S.", while in the "Channel Islands" the lowest reading was 50°.

Rainfall has been less than the mean in the extreme northern and north-eastern districts, but more in all other parts of the Kingdom.

Bright sunshine shows a very general decrease, the percentages of the possible amount of duration ranging from 11 to 25 in Ireland, from 20 to 23 in Scotland, and from 20 to 35 in England; in the "Channel Islands" the percentage was 41.

Depressions observed.—During the greater part of this period two areas of high pressure were shown, one over Scandinavia and the other over Spain. Under these conditions several low pressure systems were formed in the intervening region, causing the direction of the wind on our coasts to be rather variable, but chiefly South-Easterly. On the 9th, however, a deep depression moved northwards along our western coasts bringing Southerly and South-Westerly gales or strong winds to all our western stations. At the end of the period the high pressure in Scandinavia had disappeared and another depression was travelling northwards or north-eastwards to the north-westward of Scotland, with increasing Southerly to South-Westerly winds at all our western and northern stations.

* These values have been altered owing to the receipt of some arrears of observations.
† The values in this district are liable to alteration owing to the non-arrival of the Returns from Llandudno and Foynes.

E 23875. 350.—10/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

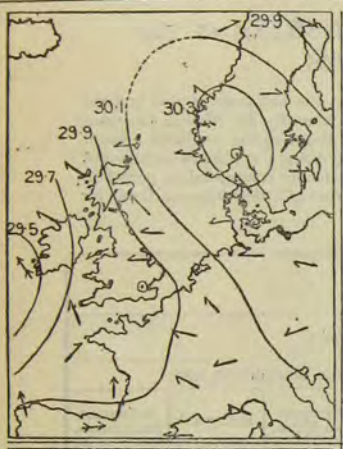
Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Tuesday, October 5.

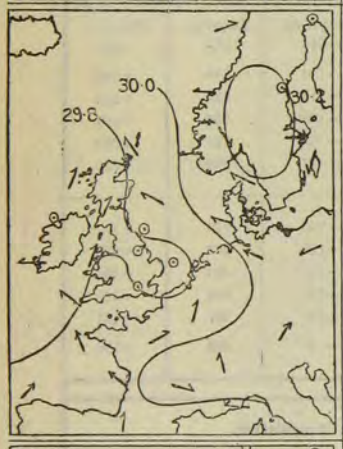
Weather rainy in the south-west of England and west of France, foggy over our northern and midland counties, and dull in Ireland and the east of Scotland, but fair or fine elsewhere. Heavy rain falling later at some of our extreme southern stations.

Temperature risen a little at our northern and eastern stations, but fallen elsewhere; readings over our Islands ranging from 64° at Dungeness to 52° in the Shetlands. Subsequently rising to 77° at Loughborough, 79° in London, and 80° at Cambridge.

Wind moderate South-Westerly or Westerly in Sweden, Spain, and the Bay of Biscay, but South-Easterly or Easterly elsewhere; strong to a gale in Ireland. Subsequently veering to South-West in the south of England.

Sea very high at Valencia and rather rough at Malin Head, but moderate to smooth elsewhere.

Barometer falling generally. Anticyclone lying over Norway, and relatively high pressures over Spain, with a depression off the south-west of Ireland, and a subsidiary disturbance over the western part of the Channel. Latter system subsequently moving north-eastwards to Central England.



Wednesday, October 6.

Weather misty or foggy in the north and east of our Islands, and rainy at some of the English stations, but fair or fine elsewhere. Severe thunderstorms occurring later in some parts of Scotland and the north of England.

Temperature fallen generally; readings over our Islands ranging from 60° at Jersey to 43° at Parsonstown. Maximum readings over England varying between 60° and 65°, from 15° to 20° lower than those of the previous day.

Wind calm or light and variable over the greater part of England, but South-Easterly or Easterly elsewhere; light or moderate in force generally. Light South-Westerly breeze setting in later over the east of England.

Sea moderate to smooth.

Barometer rising in Sweden and the East of France, but falling elsewhere. Anticyclone still lying over Scandinavia, with a depression off the south-west of Ireland and a shallow subsidiary disturbance over the east of England. Depression over England subsequently moving northwards.

Thursday, October 7.

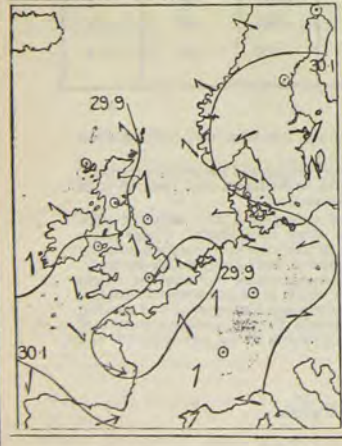
Weather rainy at our south-eastern and some of the French stations, and foggy on our north and north-east coasts, but fair or fine elsewhere. Rain falling in the north later, and thunderstorms occurring over France.

Temperature fallen a little over our Islands and Germany, but changed irregularly elsewhere; readings ranging from 59° at Falmouth, Jersey, and Dungeness, to 47° at Parsonstown.

Wind calm in Sweden and light Westerly in the south of Scotland, but South-Easterly in most other localities. Subsequently shifting to South-West in the south of Ireland.

Sea rather rough at Stornoway, but moderate to smooth elsewhere.

Barometer falling at all but our eastern stations. Pressure high both in Scandinavia and Spain, with shallow areas of low readings lying respectively over Scotland and our extreme south-west coasts. Slight rise taking place generally later, but low pressure system in the south-west moving eastwards.



Friday, October 8.

Weather fine in the west of England, but cloudy or overcast in nearly all other localities, with fog or mist in many places. Thunder heard at Yarmouth in afternoon.

Temperature changed irregularly; readings over our Islands ranging from 61° at Dungeness to 50° at Stornoway and 45° at Parsonstown.

Wind light North-Westerly in the west of England, and strong Westerly in the Bay of Biscay, but moderate from South-East or South in most other localities. Southerly winds subsequently freshening on our extreme western coasts.

Sea moderate to smooth.

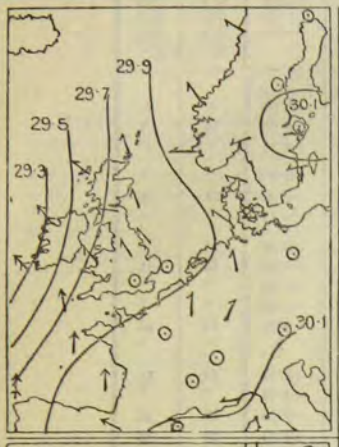
Barometer rising generally. Pressure high both in Scandinavia and Spain, with a large area of relatively low readings over our extreme western and northern coasts, and a large shallow depression over the south-east of England and north of France. Slight fall taking place later in extreme west.

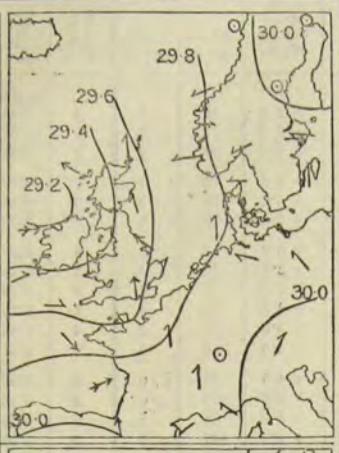
SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.	Weather during the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. TEMPERATURE AND WEATHER at 8 a.m.





Saturday, October 9.

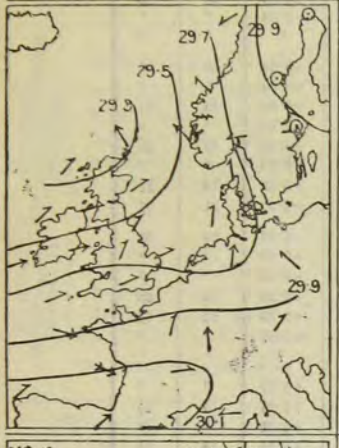
Weather foggy on the eastern parts of England as well as in Sweden, Germany, and the Netherlands, and dull on our extreme western coasts with rain at Valencia. Rain falling later in nearly all parts of our Islands—heavily in the west.

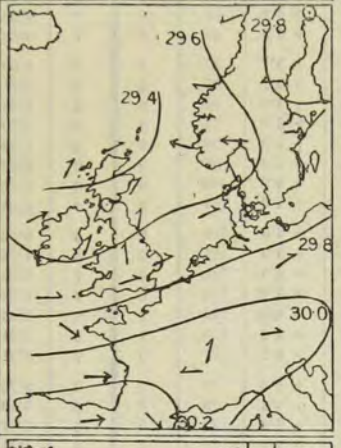
Temperature risen on our western and southern coasts, but fallen elsewhere; readings over our Islands ranging from 59° at Dungeness to 44° at Leith.

Wind calm in Sweden, Germany, and the south-east of England, but South-Easterly and Southerly elsewhere; strong on our west coasts, with a gale in the west and south of Ireland. Gale subsequently extending to many of our western and northern stations, but wind veering to West in Ireland in evening.

Sea high at Valencia and rather rough on our west and south-west coasts generally.

Barometer falling generally. Readings highest in Sweden, with deep depression off the west of Ireland. Depression subsequently moving northwards and barometer rising at Valencia, but subsidiary disturbances appearing over England.





Sunday, October 10.

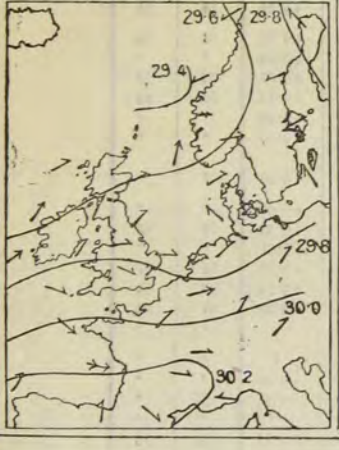
Weather foggy in Sweden and showery in the west and north of our Islands, but fair in the east. Showers falling generally later and thunderstorms occurring at many of the western and southern stations.

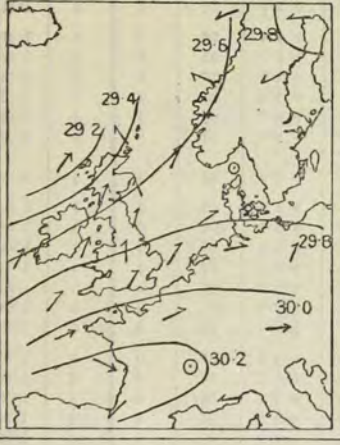
Temperature risen a little in Scandinavia and Denmark, but fallen several degrees over our Islands; readings ranging from 55° at Hurst Castle to 45° at Malin Head, Donaghadee, and Parsonstown.

Wind Southerly or South-Easterly on the eastern shores of the North Sea, but South-Westerly or Westerly elsewhere. Strong to a gale in force over the Channel and Bay of Biscay.

Sea high at Lorient and rough in the English and St. George's Channels.

Barometer rising at our western, southern, and the French stations, but falling elsewhere. Pressure now highest in Spain, but relatively high in the north of Sweden, with a large depression off the north-west of Scotland and some subsidiary disturbances over Great Britain. Depressions subsequently moving north-eastwards and barometer rising in all parts of our Islands.





Monday, October 11.

Weather rainy in some parts of Sweden, as well as in the north-west of Ireland and the north of France, but fine in most other localities. Rain falling later at all our more western and northern stations.

Temperature risen a little in Ireland, but fallen elsewhere; readings ranging from 58° at Jersey to 42° at Aberdeen and York.

Wind Easterly over the northern parts of Scandinavia, but South-Westerly or Westerly elsewhere; strong in the west of Ireland, and gale in Bay of Biscay. Subsequently increasing to fresh gale from South-West on our western coasts.

Sea rough on our west and south-west coasts and also in the Bay of Biscay, but moderate to smooth elsewhere.

Barometer rising at all but the Scandinavian and Danish stations. Pressure highest in Spain and the south of France, with a large depression off the west of Norway, and a small subsidiary disturbance near Fanö. New and deep depression approaching our north-west coasts later, and barometer falling quickly in west and north.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇛⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 161 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	55	43	53·3	47·6	50·3	+ 2·4	58	0	4	0·43	−0·54	*	*
	Stornoway	66	39	58·3	47·3	52·6	+ 5·2	74	0	5	1·31	+0·22	15	20
	Wick	60	38	55·7	48·4	51·9	+ 4·2	69	0	6	0·34	−0·31	*	*
1. SCOTLAND, E.	Nairn	66	39	60·0	45·6	52·6	+ 4·2	74	0	4	0·26	−0·30	*	*
	Aberdeen	59	37	56·6	48·7	52·5	+ 4·2	74	0	6	0·38	−0·29	17	23
	Leith	63	39	59·3	46·9	52·9	+ 3·8	76	0	3	0·32	−0·17	*	*
2. ENGLAND, N.E.	Alnwick Castle	61	40	56·9	47·6	52·1	+ 3·2	71	0	5	0·43	−0·22	*	*
	Durham	64	39	58·0	47·0	52·3	+ 2·7	72	0	5	0·43	−0·22	16	21
	Shields	59	41	56·1	48·6	52·2	+ 2·5	71	0	3	0·26	−0·32	*	*
	Scarborough ⚓	60	44	56·7	49·3	52·9	+ 2·5	76	0	6	0·55	−0·16	*	*
	York	63	40	60·3	49·4	54·7	+ 4·0	89	0	4	1·38	+0·75	14	18
	Spurn Head	59	44	58·1	51·3	54·6	+ 3·8	88	0	2	0·41	?	*	*
3. ENGLAND, E.	Hillington ⚓	75	41	63·1	47·9	55·3	+ 4·5	93	0	5	1·29	+0·67	24	31
	Yarmouth	63	43	60·6	51·9	56·1	+ 3·7	99	0	3	0·18	−0·51	*	*
	Geldeston	70	42	63·7	47·6	55·4	+ 3·9	94	0	4	0·34	−0·28	33	43
	Cambridge	80	45	63·9	49·9	56·7	+ 4·2	103	0	5	0·40	−0·25	25	32
	Rothamsted	76	42	62·2	48·3	55·0	+ 3·3	91	0	7	0·62	−0·08	*	*
	Ingatestone	74	46	62·8	49·9	56·2	+ 3·9	99	0	7	0·88	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	71	38	61·1	48·6	54·7	+ 3·7	89	0	3	1·00	−0·33	15	19
	Loughborough	77	43	62·1	50·1	55·9	+ 5·1	97	0	5	0·77	+0·09	*	*
	Leicester	78	41	63·8	49·1	56·2	+ 5·4	99	0	6	0·62	−0·03	20	26
	Cheadle ⚓	68	38	59·2	46·8	52·8	+ 2·9	76	0	6	0·70	−0·15	*	*
	Churchstoke ⚓	72	35	60·5	45·4	52·7	+ 2·0	75	0	6	1·33	+0·54	19	25
	Hereford ⚓	75	38	62·5	48·1	55·1	+ 4·0	92	0	6	0·92	+0·25	*	*
	Cirencester	73	41	60·1	47·9	53·8	+ 2·3	83	0	6	1·12	+0·38	16	21
	Oxford	76	45	62·3	50·7	56·3	+ 4·6	100	0	5	0·68	+0·05	21	27
5. ENGLAND, S.	London†	79	46	64·7	52·0	58·2	+ 5·0	113	0	5	0·52	−0·09	23	30
	Strathfield Turgiss ⚓	75	44	64·4	48·8	56·4	+ 3·9	101	0	6	1·23	+0·60	*	*
	Dungeness	69	46	64·1	52·1	57·9	+ 4·8	111	0	7	0·70	−0·03	*	*
	Hastings (St. Leonard's)	70	49	63·3	53·4	58·2	+ 5·2	113	0	7	1·08	+0·28	35	45
	Southampton	72	46	64·5	51·1	57·6	+ 4·8	109	0	6	1·48	+0·73	24	31
	Hurst Castle	69	45	63·4	52·1	57·6	+ 4·2	109	0	6	1·61	+0·87	*	*
	Stowell ⚓	69	45	62·0	49·9	55·8	+ 3·7	97	0	7	0·81	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	68	40	59·9	48·7	54·1	+ 4·2	85	0	6	2·74	+0·97	*	*
	Glasgow	60	42	58·3	48·5	53·3	+ 4·4	79	0	5	1·19	+0·25	15	20
	Ardrossan	64	38	57·6	49·3	53·3	+ 3·6	79	0	5	1·37	+0·41	*	*
	Douglas (Isle of Man)	64	40	58·1	49·1	53·5	+ 2·9	81	0	5	1·51	+0·54	18	23
7. ENGLAND, N.W.	Newton Reigny (Penrith)	66	37	59·1	45·9	52·3	+ 3·4	72	0	5	1·41	+0·61	18	24
	Barrow-in-Furness	68	46	59·1	51·7	55·1	+ 3·7	92	0	6	1·47	+0·54	*	*
	Stonyhurst	65	42	58·6	47·6	52·9	+ 2·9	76	0	6	1·62	+0·37	15	19
	Blackpool ⚓	68	45	59·8	50·3	54·9	+ 3·0	90	0	5	1·12	+0·15	20	26
	Manchester	71	40	61·3	48·6	54·8	+ 4·1	90	0	6	1·42	+0·44	*	*
	Liverpool Obsy (Bidston)	72	46	60·9	51·3	56·0	+ 3·6	98	0	6	0·82	0·00	*	*
	Llandudno ⚓													
	Holyhead	71	46	60·6	51·9	56·1	+ 2·9	99	0	5	0·78	−0·20	*	*
8. ENGLAND, S.W.	Llandovery	71	36	64·0	44·7	54·1	+ 1·8	85	0	5	1·90	+0·65	*	*
	Pembroke	62	50	59·4	53·7	56·5	+ 3·4	102	0	6	1·48	+0·55	25	32
	Arlington (N. Devon)	68	41	61·4	47·6	54·3	+ 2·1	83	0	6	1·91	+0·61	*	*
	Cullompton ⚓	66	42	62·8	48·3	55·3	+ 2·5	93	0	6	1·08	+0·18	21	27
	Falmouth	63	48	60·1	51·0	55·4	+ 1·0	94	0	6	1·96	+0·71	27	35
	Plymouth	65	45	62·2	50·7	56·3	+ 2·3	100	0	5	1·63	+0·76	27	35
	Prawle Point	67	38	61·1	50·7	55·7	+ 2·8	96	0	5	1·90	?	*	*
9. IRELAND, N.	Malin Head	64	44	57·3	49·9	53·5	+ 4·1	81	0	6	1·79	?	*	*
	Londonderry	68	40	59·8	47·5	53·5	+ 3·7	81	0	6	1·41	+0·44	*	*
	Mullaghmore	65	41	59·1	48·4	53·6	+ 3·3	81	0	4	1·25	+0·31	*	*
	Belmullet	64	45	59·1	49·1	54·0	+ 2·5	84	0	4	1·70	?	*	*
	Markree Castle	63	35	59·7	44·2	51·7	+ 1·7	68	0	4	1·15	+0·28	10	13
	Brookeborough	65	33	58·0	45·7	51·7	+ 2·0	68	0	5	1·06	?	*	*
	Armagh	65	39	58·4	47·6	52·8	+ 2·8	76	0	6	1·25	+0·55	6	8
	Donaghadee	62	38	56·9	45·9	51·1	+ 0·2	64	0	4	1·41	+0·66	*	*
	Edgeworthstown	64	36	56·1	43·7	49·7	− 0·4	54	0	5	1·08	+0·38	*	*
10. IRELAND, S.	Dublin	65	42	58·9	47·7	53·1	+ 2·0	78	0	7	2·05	+1·35	22	29
	Parsonstown	66	39	59·7	44·4	51·8	+ 1·0	69	0	3	0·73	−0·02	19	25
	Kilkenny	65	35	60·1	44·4	52·0	+ 0·7	70	0	3	1·15	+0·44	*	*
	Waterford	65	39	60·4	47·4	53·7	+ 1·4	82	0	5	1·69	+0·76	*	*
	Roche's Point	65	47	61·4	51·7	56·2	+ 3·4	99	0	4	1·81	+0·86	*	*
	Valencia	65	47	61·1	51·9	56·4	+ 2·7	101	0	5	1·12	−0·18	17	22
	Killarney	64	44	61·0	47·0	53·8	+ 1·2	83	0	4	1·14	?	*	*
	Foynes	65	43	60·0	47·6	53·6	+ 2·0	81	0	3	1·05	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)												*	*
	Jersey (Noirmont)	66	50	62·4	54·7	58·4	+ 2·3	115	0	5	2·18	+1·22	32	41

Stations marked ⚓ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 42.] *New Series.* WEEK ENDING MONDAY, 18TH OCTOBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period [in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 168.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
				Averages of				For the Week.		Since December 29, 1885.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	33	52·6	43·0	47·7	1 above.	40	0	1570	−205	669	+146
	1. SCOTLAND, EAST	59	34	54·1	43·2	48·5	1 above.	46	0	2151	−120	740	+186
	2. ENGLAND, N.E.	60	36	54·9	45·6	50·1	2 above.	57	0	2334	−104	697	+209
	3. ENGLAND, EAST	63	37	56·8	45·4	50·9	1 above.	62	0	2804	+ 5	750	+238
	4. MIDLAND COUNTIES	60	35	54·3	44·6	49·3	0 (average).	51	0	2748	− 17	721	+205
	5. ENGLAND, SOUTH	63	33	56·6	45·7	51·0	0 (average).	63	0	3046	+ 16	590	+213
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	61	41	54·9	45·8	50·2	2 above.	57	0	2128	−260	579	+175
	7. ENGLAND, N.W.	59	38	54·6	47·1	50·8	1 above.	62	0	2436	−110	612	+227
	8. ENGLAND, S.W.	60	37	55·6	45·2	50·2	2 below.	57	0	2779	−117	490	+256
	9. IRELAND, NORTH	58	36	54·5	44·1	49·2	1 above.	50	0	2396	− 74	492	+138
	10. IRELAND, SOUTH	64	38	55·0	45·6	50·1	0 (average).	57	0	2663	−131	401	+160
	— CHANNEL ISLANDS	61	44	57·4	49·4	53·3	2 below.	79	0	3111 *	− 47	202	+109

Rainfall. **Bright Sunshine.**

	DISTRICTS. (See p. 168.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	9	0 (average).	204	+24	27·2	− 0·5	22	31	1179	+ 55	30	+ 1
	1. SCOTLAND, EAST	5	7	2 more.	156	+ 2	19·4	− 1·8	9	13	1247	− 27	32	− 1
	2. ENGLAND, N.E.	6	12	6 more.	157	+ 8	21·9	0·0	13	18	1023	−151	27	− 3
	3. ENGLAND, EAST	6	15	9 more.	147	− 4	18·9	− 2·8	20	28	1373	− 44	36	− 1
	4. MIDLAND COUNTIES	7	17	10 more.	154	+ 6	25·6	+ 2·0	8	11	1134	−140	30	− 4
	5. ENGLAND, SOUTH	6	14	7 more.	143	+ 1	21·6	− 0·5	15	20	1370	+ 5	36	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	6	17	3 more.	169	+ 3	35·2	+ 3·6	18	25	1084	−146	28	− 4
	7. ENGLAND, N.W.	6	19	9 more.	162	+ 7	32·9	+ 5·1	10	14	1113	−120	29	− 3
	8. ENGLAND, S.W.	6	26	16 more.	161	− 1	33·2	− 0·9	16	22	1303	−170	34	− 5
	9. IRELAND, NORTH	6	24	16 more.	179	− 5	32·2	+ 2·4	17	23	952	−190	25	− 5
	10. IRELAND, SOUTH	6	21	12 more.	174	+ 3	35·0	+ 3·3	15	21	1113	−198	29	− 5
	— CHANNEL ISLANDS	7	26	17 more.	185 *	+10	27·1 *	+ 1·5	15	20	1636	−108	43	− 3

General Remarks.

Weather has been rough and unsettled in all parts of the Kingdom, with heavy and continuous falls of rain. In a few places thunder and lightning were experienced.

Temperature has been 1° or 2° above the mean in Scotland, the greater part of England, and north of Ireland, but 2° below it in "England, S.W." and the "Channel Islands". The highest of the maxima, which were generally recorded either on the 12th or 14th, ranged from 55° in "Scotland, N." to 63° in "England, E." and "England, S.", and 64° in "Ireland, S." The lowest of the minima, which were registered on irregular dates, ranged from 33° in "Scotland, N." and "England, S." to 41° in "Scotland, W." and 44° in the "Channel Islands".

Rainfall has about equalled the mean in "Scotland, N.", but in all other districts it has been more than the normal value; over all the southern, south-western, and western parts of the Kingdom the amount has been unusually large.

Bright sunshine shows a slight increase in Ireland and the north and west of Scotland from the low percentages recorded there last week, but elsewhere a very decided decrease is shown. The percentages of the possible amount of duration ranged from 11 in the "Midland Counties" to 28 in "England, E." and 31 in "Scotland, N."

Depressions observed.—At the commencement of the period a large depression was travelling north-eastwards outside our extreme north-western and northern coasts, while a small subsidiary disturbance, which subsequently moved northwards over the North Sea and became much deeper, was passing eastwards over England. By the 15th a new and very deep depression had appeared over Ireland from the Atlantic, and, after moving somewhat erratically in a south-easterly direction from the Irish Sea to the north-east of France, and then in a north-easterly direction to Holland, was at the end of the period gradually filling up. During its progress over our Islands it produced exceptionally severe gales, at first from South-West and afterwards from West or North-West, on all our western, south-western, and southern coasts, as well as over the Bay of Biscay, and fresh South-Easterly or Easterly gales in the east and north of the United Kingdom.

* These values have been altered owing to the receipt of some arrears of observations.

E 23945. 350.—10/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

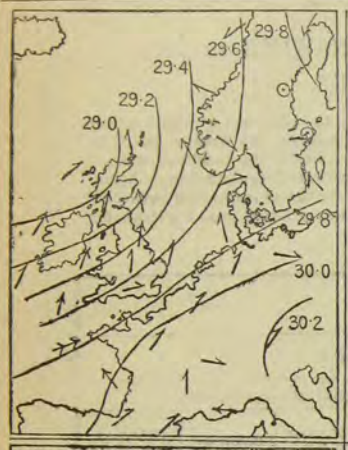
Weather

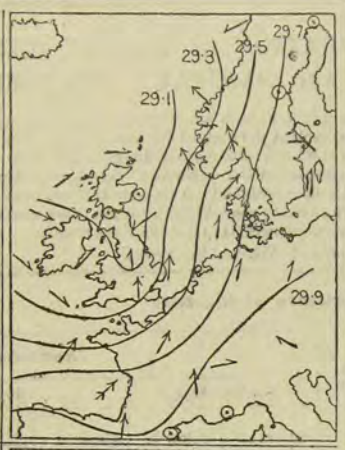
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, October 12.

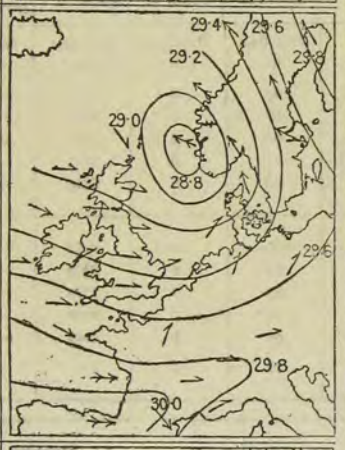
Weather fine in Germany, the Netherlands, and the eastern parts of England and France, but cloudy or overcast elsewhere, with rain in many places. Rain extending to our eastern stations later. Thunderstorms occurring in the south of Ireland at night.

Temperature risen several degrees over our Islands, but fallen at the Continental stations; readings over the United Kingdom ranging from 59° at Dungeness to 47° at Stornoway.

Wind calm in Sweden and moderate South-Easterly in Norway, but Southerly or South-Westerly elsewhere, with fresh gales at some of our western stations. Fresh to strong Southerly gales subsequently occurring in the east and south-east of England.

Sea rough in the west and south.

Barometer falling at all but the German and Swedish stations. Pressure high (30·2 ins.) in Portugal and South Germany, with a large and deep depression over the north-west of Scotland. Well-marked subsidiary disturbance subsequently forming over the Irish Sea, and moving eastwards across the north of England.



Wednesday, October 13.

Weather dull on the eastern shores of the North Sea and rainy in Germany, but fair or fine elsewhere. Rain falling later at most of our western, southern, and extreme northern stations.

Temperature fallen in our Islands, but risen at the Continental stations; readings over the United Kingdom ranging from 53° at Hurst Castle to 43° at Donaghadee.

Wind moderate Westerly over the greater part of our Islands, but Westerly gales reported in the west of France, South-Westerly gales in Belgium, and South-Easterly gales on the eastern shores of the North Sea.

Sea high in the Bay of Biscay, and rough in the Channel, but moderate to smooth elsewhere.

Barometer rising over the greater part of our Islands, but falling on the Continent. Pressure highest in Spain, with a large trough of low readings over the North Sea. Well-defined depression subsequently developed in trough, with centre near Skudesnaes in evening.

Thursday, October 14.

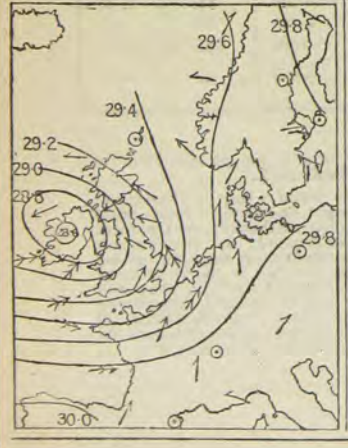
Weather rainy in the north-west of England and showery in the west of Scotland and north of Ireland, but fair or fine elsewhere. Heavy rain setting in over Ireland in evening.

Temperature risen a little on our western coasts, but fallen elsewhere; readings over our Islands ranging from 55° at Jersey to 40° at Aberdeen.

Wind moderate Westerly in our Islands and South-Westerly in the Netherlands and Germany, but strong from South-East in Scandinavia. Fresh Westerly gale in Bay of Biscay. Subsequently backing to South or South-East on our western coasts, and increasing to gale.

Sea high at Biarritz, and rough at our more exposed stations.

Barometer falling in the north of Scandinavia, but rising elsewhere. Pressure still highest in Spain, with the depression of the previous evening moving northwards along the Norwegian coasts. New and deep disturbance subsequently approaching Ireland, and barometer falling rapidly in extreme west.



Friday, October 15.

Weather fair in Norway, Denmark, and the North of Scotland, but squally and rainy elsewhere. Heavy rain falling later in many parts of our Islands.

Temperature risen in our Islands and the north of France, but fallen in Sweden, Denmark, and Germany; readings over the United Kingdom ranging from 57° at several of our southern stations to 47° in the north of Scotland.

Wind Westerly to South-Westerly at our southern and the French stations, South-Easterly on our east coasts, and Easterly or North-Easterly in the north; strong to whole gale reported over the Channel, the Bay of Biscay, and our south-west coasts generally, and moderate or fresh gale elsewhere. Severe gale continuing in the south-west and south all day.

Sea very high in the south-west, rough elsewhere.

Barometer rising a little at Valencia and also in Sweden, but falling elsewhere. Pressure still highest in Spain, with centre of deep depression over Ireland. Depression subsequently moving slowly eastwards, but remaining stationary over the Irish Sea for some hours. Brisk rise taking place in Ireland during latter part of day.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

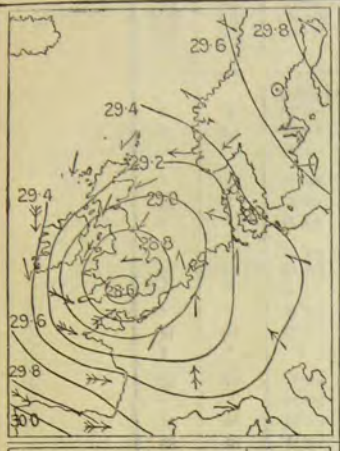
Weather

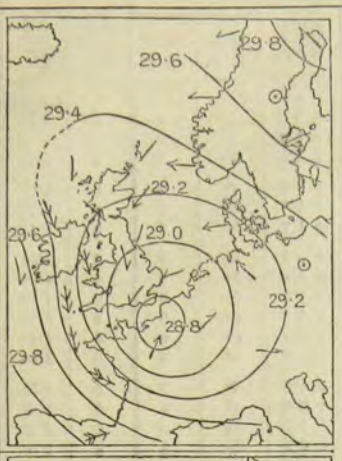
During the 24 hours succeeding 8 a.m. on the dates given.

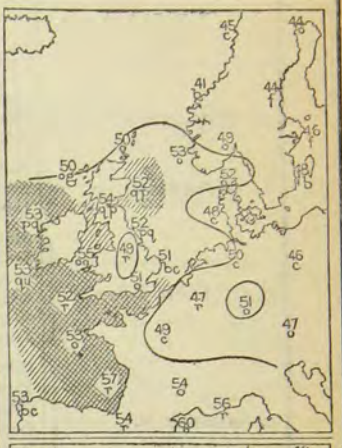
Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.







Saturday, October 16.

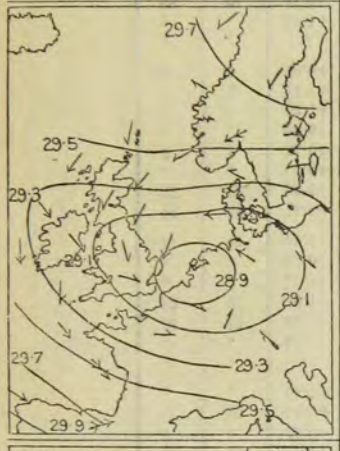
Weather dull generally with rain over the greater part of our Islands and France. Some improvement taking place in west and south later.

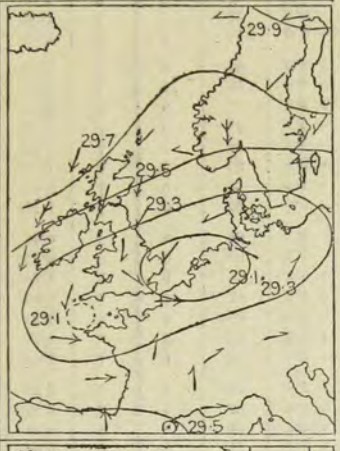
Temperature risen a little over Germany, Denmark, the north of our Islands, and the south of France, but fallen elsewhere; readings over our Islands varying from 55° on the shores of the Irish Sea to 47° at Loughborough and Oxford.

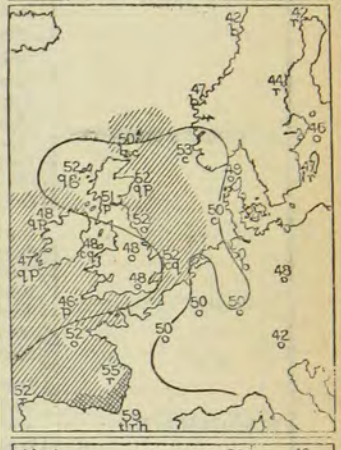
Wind blowing a strong gale from North on our west coasts and a severe gale from West over the Bay of Biscay and the western parts of the Channel. Moderate South-Easterly breezes reported over Scandinavia, the Netherlands, and the east of England, but strong North-Easterly winds on our northern coasts. Gales in West and South subsiding gradually later.

Sea very high on our western and southern coasts, and rough elsewhere.

Barometer falling at all but our western and northern stations where brisk rise in progress. Deep depression of previous day now lying over the south of England. Disturbance subsequently moving away in an east-south-easterly direction and barometer rising over the whole of our Islands.







Sunday, October 17.

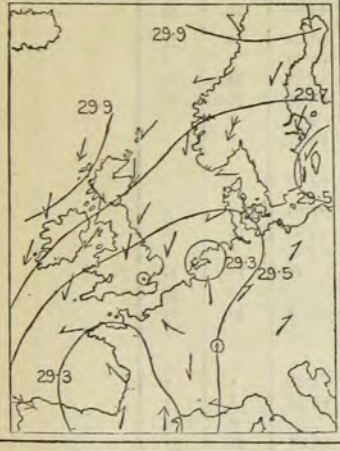
Weather cloudy generally, with rain in many places and a thunderstorm at Biarritz. Improvement taking place in south later.

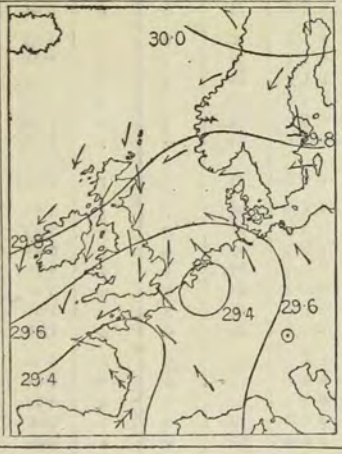
Temperature risen a little on our north and east coasts, but fallen elsewhere; readings over our Islands ranging from 52° at Stornoway, Wick, and Leith, to 42° at Parsonstown.

Wind Easterly or North-Easterly over Scandinavia, Denmark, and the north of our Islands, but North-Westerly or Westerly elsewhere; strong in force on our west and south-west coasts, and strong to a gale in the Bay of Biscay. Subsequently veering to North-East in the north of Ireland and increasing to a gale.

Sea rough on our extreme south-west coasts and rather rough in the north and east.

Barometer falling a little in Denmark, the Netherlands, and Germany, as well as in Ireland, but rising elsewhere. Depression of previous two days now filling up over Holland, but subsidiary disturbance forming over the rest of Ireland. Latter system moving southwards and barometer rising in Ireland.





Monday, October 18.

Weather rainy on the shores of the Baltic, and showery over the eastern parts of Great Britain, but fair or fine elsewhere. Showers falling later at some of our western stations, and aurora seen in the Hebrides at night.

Temperature risen a little at our western stations, but fallen elsewhere; readings over our Islands ranging from 58° at Holyhead and Valencia to 39° at Dungeness.

Wind moderate Southerly in the west of France, and South-Westerly in Germany, but fresh or strong from North-East elsewhere.

Sea rough on the east coasts of Great Britain and rather rough in the west, but moderate to smooth elsewhere.

Barometer rising at all but the Spanish and southern French stations. Pressure now highest over the north of Scandinavia and the north-west of our Islands, with depressions over the Baltic, Holland, and the Bay of Biscay. Depressions partially dispersing in the course of day, and barometer rising generally.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 165 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	54	41	52·0	43·4	47·6	+ 0·9	39	0	5	0·65	−0·32	*	*
	Stornoway	55	36	52·9	42·9	47·8	+ 1·6	41	0	6	1·69	+0·57	22	31
	Wick	54	33	53·0	42·7	47·7	+ 1·4	40	0	4	0·44	−0·31	*	*
1. SCOTLAND, E.	Nairn	56	37	53·6	42·3	47·8	+ 0·6	41	0	5	0·69	+0·15	*	*
	Aberdeen	59	34	54·6	42·4	48·2	+ 1·3	43	0	3	0·28	−0·37	9	13
	Leith	58	42	54·1	44·9	49·4	+ 1·7	52	0	6	1·15	+0·70	*	*
2. ENGLAND, N.E.	Alnwick Castle	59	41	53·6	45·6	49·5	+ 2·1	53	0	6	1·00	+0·37	*	*
	Durham	59	38	54·8	44·9	49·7	+ 1·8	54	0	6	1·50	+0·83	12	17
	Shields	60	36	54·7	44·1	49·2	+ 0·9	50	0	6	0·80	+0·24	*	*
	Scarborough ℳ	60	42	54·9	47·6	51·2	+ 2·8	64	0	6	1·12	+0·41	*	*
	York	59	40	55·7	44·3	49·8	+ 0·5	55	0	6	1·35	+0·75	13	18
	Spurn Head	59	45	55·4	46·9	51·0	+ 1·8	63	0	6	1·34	?	*	*
3. ENGLAND, E.	Hillington ℳ	61	37	56·9	46·0	51·3	+ 2·0	65	0	6	1·35	+0·75	19	26
	Yarmouth	60	41	56·7	45·9	51·0	+ 0·4	63	0	6	1·57	+0·90	*	*
	Geldeston	62	39	58·9	46·4	52·5	+ 1·7	74	0	6	1·92	+1·31	26	35
	Cambridge	63	37	57·9	44·7	51·1	+ 0·5	64	0	6	1·14	+0·51	16	22
	Rothamsted	59	37	54·6	44·8	49·5	− 0·3	53	0	7	1·96	+1·26	*	*
	Ingatestone	59	38	55·8	?44·5	?50·0	?− 0·6	?56	0	6	1·11	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	60	39	55·0	45·6	50·2	+ 0·6	57	0	6	1·49	+0·81	6	8
	Loughborough	60	42	55·4	44·6	49·8	+ 0·8	55	0	7	1·95	+1·27	*	*
	Leicester	59	38	54·7	45·8	50·1	+ 0·8	57	0	7	2·14	+1·52	6	8
	Cheadle ℳ	57	38	53·0	43·4	48·1	− 0·1	43	0	7	1·65	+0·80	*	*
	Churchstoke ℳ	58	39	53·4	43·5	48·3	− 0·7	44	0	7	1·52	+0·71	6	8
	Hereford ℳ	59	40	54·6	44·8	49·6	− 0·1	53	0	7	1·60	+0·93	*	*
	Cirencester	57	35	53·4	43·6	48·4	− 1·4	45	0	7	1·64	+0·92	12	16
	Oxford	59	41	54·6	45·3	49·8	− 0·3	55	0	7	1·32	+0·71	10	14
5. ENGLAND, S.	London†	61	39	57·1	45·6	51·2	− 0·1	64	0	5	0·93	+0·32	10	14
	Strathfield Turgiss ℳ	61	33	56·9	44·4	50·5	− 0·3	60	0	6	0·85	+0·23	*	*
	Dungeness	63	36	58·9	45·3	51·9	+ 0·2	69	0	5	1·62	+0·87	*	*
	Hastings (St. Leonard's)	61	41	57·1	46·4	51·6	+ 0·1	67	0	5	1·83	+1·01	21	28
	Southampton	61	39	56·5	46·1	51·2	− 0·4	64	0	6	1·33	+0·58	13	18
	Hurst Castle	60	40	57·4	47·4	52·3	+ 0·3	72	0	6	0·85	+0·12	*	*
	Stowell ℳ	58	37	52·5	44·9	48·6	− 1·8	46	0	7	2·46	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	61	41	55·7	43·5	49·4	+ 1·0	52	0	5	2·93	+1·16	*	*
	Glasgow	55	42	53·3	45·4	49·2	+ 2·0	50	0	6	1·24	+0·31	15	21
	Ardrossan	58	45	55·3	47·3	51·2	+ 2·9	64	0	6	0·40	−0·57	*	*
	Douglas (Isle of Man)	58	42	55·3	46·9	51·0	+ 1·2	63	0	6	2·02	+1·04	21	29
7. ENGLAND, N.W.	Newton Reigny (Penrith)	56	38	53·2	44·2	48·6	+ 1·3	46	0	7	1·83	+1·03	8	11
	Barrow-in-Furness	57	46	54·7	48·1	51·3	+ 1·4	65	0	5	2·41	+1·47	*	*
	Stonyhurst	57	43	53·8	45·7	49·6	+ 1·1	53	0	6	1·43	+0·18	10	14
	Blackpool ℳ	59	47	55·8	48·7	52·2	+ 1·6	71	0	6	1·62	+0·65	13	18
	Manchester	57	41	54·2	45·8	49·9	+ 0·7	55	0	6	1·86	+0·88	*	*
	Liverpool Obsy (Bidston)	59	46	55·1	47·9	51·4	+ 1·7	66	0	7	1·59	+0·77	*	*
	Llandudno ℳ													
	Holyhead	58	46	55·6	49·4	52·4	+ 0·5	73	0	7	2·18	+1·16	*	*
8. ENGLAND, S.W.	Llandovery	59	40	55·3	43·7	49·3	− 1·6	51	0	7	4·23	+2·98	*	*
	Pembroke	58	38	55·7	46·1	50·7	− 2·1	61	0	5	2·42	+1·49	11	15
	Arlington (N. Devon)	58	40	54·0	44·3	49·0	− 1·8	49	0	7	3·38	+2·07	*	*
	Cullompton ℳ	59	37	56·0	45·3	50·2	− 1·0	57	0	7	2·62	+1·72	14	19
	Falmouth	60	39	55·8	44·8	50·1	− 3·0	57	0	6	2·50	+1·25	19	26
	Plymouth	60	86	56·6	46·3	51·3	− 1·3	65	0	6	1·33	+0·48	19	26
	Prawle Point	60	39	56·1	45·0	50·9	− 1·3	62	0	6	1·95	?	*	*
9. IRELAND, N.	Malin Head	55	42	53·7	45·4	49·4	+ 1·0	52	0	5	0·89	?	*	*
	Londonderry	57	41	55·0	43·7	49·2	+ 0·9	50	0	6	2·63	+1·66	*	*
	Mullaghmore	57	45	54·7	47·4	50·9	+ 2·3	62	0	6	2·22	+1·29	*	*
	Belmullet	56	46	54·3	47·6	50·9	+ 0·3	62	0	7	2·87	?	*	*
	Markree Castle	58	38	55·2	43·3	49·1	+ 0·8	50	0	6	3·14	+2·27	20	27
	Brookeborough	58	39	54·6	42·5	48·4	+ 0·6	45	0	5	2·57	?	*	*
	Armagh	56	39	54·5	42·9	48·5	+ 0·3	46	0	6	2·82	+2·11	13	18
	Donaghadee	57	36	54·9	41·3	47·9	− 2·2	44	2	5	2·02	+1·27	*	*
	Edgeworthstown	56	38	54·0	42·9	48·3	+ 0·4	44	0	5	2·45	+1·76	*	*
10. IRELAND, S.	Dublin	59	40	54·5	45·7	50·0	+ 0·1	56	0	7	2·71	+2·01	11	15
	Parsonstown	56	40	54·3	44·0	49·0	+ 0·2	49	0	6	2·44	+1·69	15	21
	Kilkenny	58	40	53·9	44·3	48·9	− 0·4	48	0	6	2·02	+1·32	*	*
	Waterford	64	38	55·3	44·9	50·0	− 1·0	56	0	5	1·57	+0·63	*	*
	Roche's Point	58	41	56·0	46·9	51·3	− 0·3	65	0	6	1·16	+0·21	*	*
	Valencia	59	45	56·1	48·0	51·9	− 0·5	69	0	7	2·25	+0·88	20	27
	Killarney	59	41	55·7	44·5	49·9	− 1·2	55	0	6	2·92	?	*	*
	Foynes	57	42	54·0	46·2	50·0	+ 0·1	56	0	5	2·00	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)												*	*
	Jersey (Noirmont)	61	44	57·4	49·3	53·3	− 1·6	79	0	7	2·64	+1·66	15	20

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 43.] *New Series.* WEEK ENDING MONDAY, 25TH OCTOBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS. (See p. 172.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	32	52·4	42·0	47·1	2 above.	36	0	1606	−195	669	+129
	1. SCOTLAND, EAST	56	32	52·2	41·1	46·5	1 above.	35	3	2186	−109	743	+168
	2. ENGLAND, N.E.	57	35	52·8	44·8	48·7	2 above.	47	0	2381	− 86	697	+197
	3. ENGLAND, EAST	62	33	55·4	43·8	49·5	1 above.	53	0	2857	+ 22	750	+226
	4. MIDLAND COUNTIES	61	31	53·8	42·8	48·1	1 above.	43	0	2791	− 7	721	+191
	5. ENGLAND, SOUTH	62	33	56·5	44·6	50·4	1 above.	59	0	3104	+ 34	590	+206
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	61	32	53·3	42·0	47·5	1 above.	39	0	2167	−249	579	+161
	7. ENGLAND, N.W.	60	32	53·4	44·3	48·7	0 (average).	47	0	2485*	− 92	612	+218
	8. ENGLAND, S.W.	59	34	54·9	45·6	50·1	0 (average).	57	0	2836	−107	490	+252
	9. IRELAND, NORTH	57	29	52·7	41·1	46·7	0 (average).	37	3	2333	−168	495	+129
	10. IRELAND, SOUTH	58	31	53·7	42·8	48·1	1 below.	43	0	2706	−127	401	+152
	— CHANNEL ISLANDS	59	47	56·5	50·0	53·2	0 (average).	78	0	3188	− 30	202	+109

	DISTRICTS. (See p. 172.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	5	4 less.	207	+23	27·7	− 0·9	38	57	1217	+ 71	31	+ 2
	1. SCOTLAND, EAST	5	6	0 (average).	161	+ 3	20·0	− 1·8	9	13	1256	− 42	32	− 1
	2. ENGLAND, N.E.	3	5	1 less.	160	+ 7	22·4	− 0·1	16	23	1039	−149	27	− 3
	3. ENGLAND, EAST	3	4	2 less.	150	− 6	19·3	− 3·1	19	28	1392	− 46	36	− 1
	4. MIDLAND COUNTIES	4	5	2 less.	158	+ 5	26·1	+ 1·8	14	20	1148	−141	30	− 3
	5. ENGLAND, SOUTH	5	6	1 less.	148	+ 2	22·2	− 0·6	14	20	1384	+ 2	36	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	2	1	8 less.	171	+ 1	35·3	+ 2·8	22	32	1106	−143	28	− 4
	7. ENGLAND, N.W.	2	3	7 less.	163*	+ 5	33·1*	+ 4·3	22	32	1135	−112	29	− 3
	8. ENGLAND, S.W.	5	11	0 (average).	166	0	34·3	− 0·9	13	19	1316	−175	34	− 5
	9. IRELAND, NORTH	2	2	6 less.	181	− 7	32·4	+ 1·7	25	37	977	−185	25	− 5
	10. IRELAND, SOUTH	2	6	3 less.	176	+ 1	35·6	+ 3·1	21	30	1134	−196	29	− 5
	— CHANNEL ISLANDS	7	14	5 more.	192	+12	27·8*	+ 1·1	17	24	1653	−111	43	− 3

General Remarks.

Weather has been mostly fair in Ireland, the north-west of England, and the west and north of Scotland, but cloudy elsewhere, with rain at frequent intervals. Heavy thunderstorms were experienced over the south of England on the night of the 19th, over our midland and eastern counties on the following day, and in the north of England on the 21st.

Temperature has been about equal to the average in the west of England, the north of Ireland, and the "Channel Islands", and a little below in "Ireland, S.", but elsewhere it has been rather above its normal value. The highest readings, which were recorded on irregular dates, ranged from 62° in "England, E." and "England, S.", to 56° in "Scotland, E." The lowest readings were registered either on the 22nd or 23rd, when the sheltered thermometer fell to 32° or below in all but the southern and eastern districts. In "Ireland, N." (at Brookeborough) a temperature of 29° was observed on the 22nd.

Rainfall has exceeded the average in the "Channel Islands", and has been about equal to it in "Scotland, E." and "England, S.W.", but in all other districts it has been less than the normal, and in "Scotland, W.", "England, N.W.", and "Ireland, N." the deficit has been considerable.

Bright sunshine has been more prevalent than it was last week, the percentages of the possible amount of duration ranging from 57 in "Scotland, N." and 37 in "Ireland, N." to 19 in "England, S.W." and to 13 in "Scotland, E."

Depressions observed.—Barometrical pressure has been throughout the period highest in Scandinavia, but during the early part of the week it was relatively high in Spain also, and with these conditions there was a tendency for depressions to form over France and our south-eastern districts. During the 20th and 21st a well-defined, though shallow depression moved north-eastwards over the south-east of England, and occasioned the thunderstorms referred to above. As this disturbance advanced, the winds over our Islands were moderate from the North-Eastward, but they afterwards became variable or North-Westerly. On the 22nd, the system dispersed over the North Sea, and although a new depression of greater depth threatened our west coasts, this soon passed away again over the Atlantic. On the 23rd, the anticyclone which had previously existed over Scandinavia began to spread south-eastwards, and between this time and the close of the week, two low pressure systems appeared over the Bay of Biscay, occasioning strong Easterly winds on our south and south-east coasts, with rain in the extreme south and thunderstorms over France.

* These values have been altered, owing to the receipt of some arrears of observations.

E 24040. 350.—10/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Tuesday, October 19.

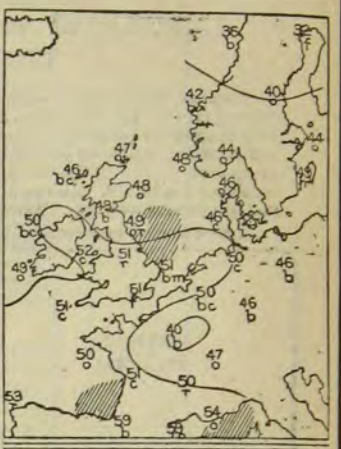
Weather rainy in the north and foggy in the south-east of England, but fair in most other localities. Thunderstorms occurring at night at many of the southern stations.

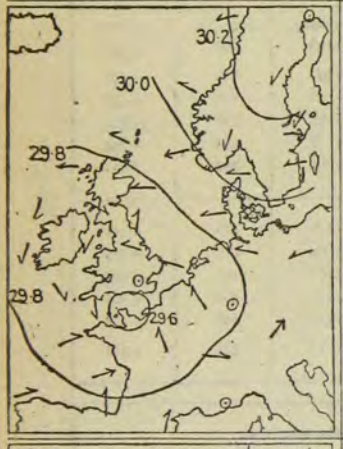
Temperature risen a little in the south of England and the west of France, but fallen elsewhere; readings over our Islands ranging from 53° at Spurn Head and Jersey to 46° at Stornoway.

Wind South-Easterly in France and Germany, but Easterly or North-Easterly elsewhere; strong to a gale in the west of France, but moderate in force in most other localities.

Sea rather rough off the north-east of England.

Barometer rising generally. Pressure highest in the north of Sweden, with a depression over the Bay of Biscay and a shallow disturbance over the south-east of England. Slight fall taking place on our western and northern coasts later.





Wednesday, October 20.

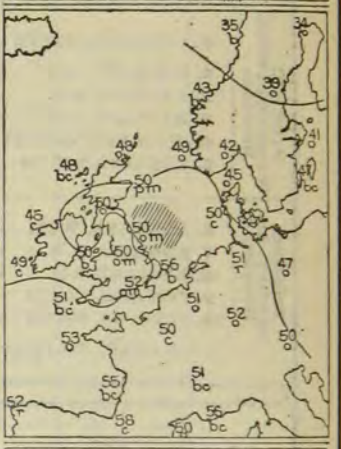
Weather dull in the north and east, with fog and rain locally, but fair or fine elsewhere. Severe thunderstorms occurring later over our midland and eastern counties.

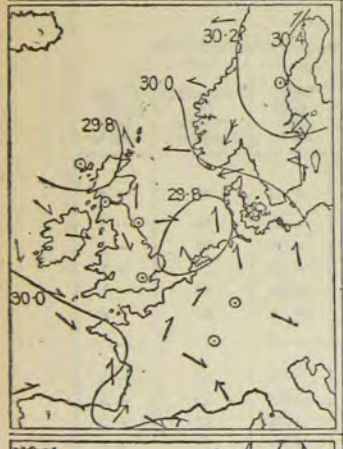
Temperature changed irregularly; readings over our Islands ranging from 57° at Dungeness to 45° at Mullaghmore and 44° at Nairn.

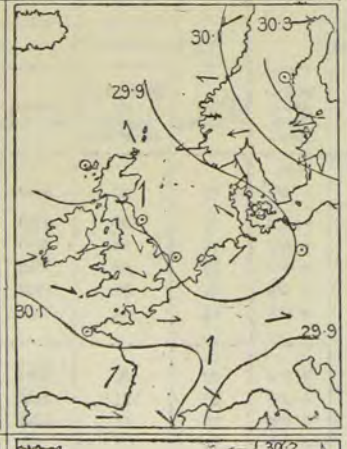
Wind light from North or North-West on our west and south-west coasts, but moderate from South or South-East over France, the Netherlands, and the south-east of England, and from North-East in Sweden. Subsequently backing to West over the English Channel.

Sea rather rough at Shields, but moderate to smooth elsewhere.

Barometer falling on our western and northern coasts, but rising in most other localities. Pressure highest in the north of Sweden, with a shallow depression over the English Channel. Depression subsequently moving north-eastwards, and partially filling up.







Thursday, October 21.

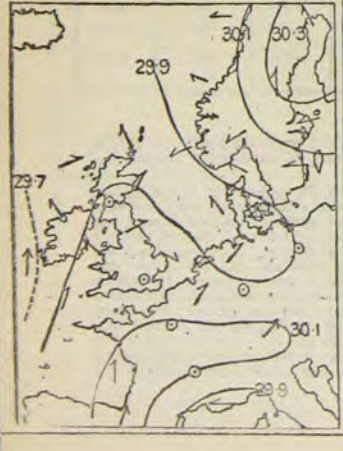
Weather fine at many of our western and south-western stations, but cloudy elsewhere, with fog over the east of Great Britain and rain in the south of Norway and some parts of France. Thunderstorms occurring later over the north of England, and faint aurora seen at Mullaghmore at night.

Temperature risen a little in the west of our Islands, but fallen elsewhere; readings ranging from 52° at Spurn Head to 40° at Dungeness. Frost experienced at night over the inland parts of Ireland and Scotland.

Wind light Southerly in Denmark, the Netherlands, and the south-west and north-east of France, strong Easterly in the south of Scandinavia, calm in Scotland and the north-east of England, and light Westerly or North Westerly on our west, south, and south-east coasts.

Sea rough at Sumburgh Head, but moderate to smooth elsewhere.

Barometer rising at all but the Danish stations. Pressure highest over the Gulf of Bothnia, but relatively high in Spain, with shallow depressions over the north of Scotland, the southern part of the North Sea, and the south-east of France. Rise continuing all day, and depressions over Scotland and the North Sea filling up.



Friday, October 22.

Weather fair over the greater part of our Islands and France, but dull elsewhere, with rain at Valencia and also in the neighbourhood of the Skager Rack. Rain falling later at all our western stations.

Temperature risen a little in the south of Ireland, but fallen elsewhere; readings ranging from 53° at Roche's Point, Prawle Point, and Jersey to 35° at Donaghadee, and 34° at Nairn. Frost occurring in the north of Scotland at night.

Wind moderate to strong South-Easterly or Southerly on our western coast, but light Westerly in the north and east of Great Britain, and Easterly over the southern parts of Scandinavia. Subsequently backing to South-East in England.

Sea rough at Valencia, slight or smooth elsewhere.

Barometer falling on the west coasts of our Islands and France, but rising elsewhere. Pressure highest in the north of Sweden, with depressions off the west of Ireland and the south-east of France, and a shallow trough of relatively low readings over the North Sea. New disturbance approaching our south-west coasts in evening.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

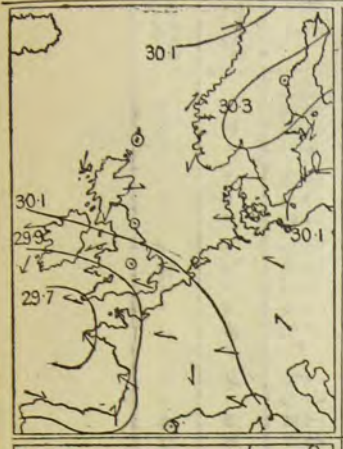
Weather

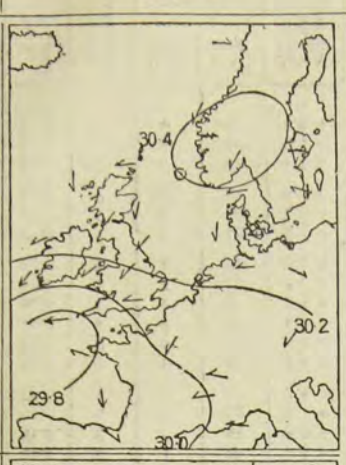
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, October 23.

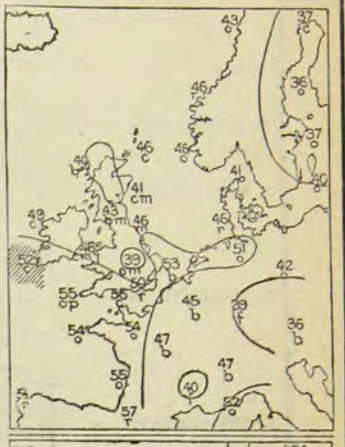
Weather rainy at our extreme southern and the French stations and cloudy in most other localities, with fog or mist locally. Slight rain falling later on our north and north-east coasts.

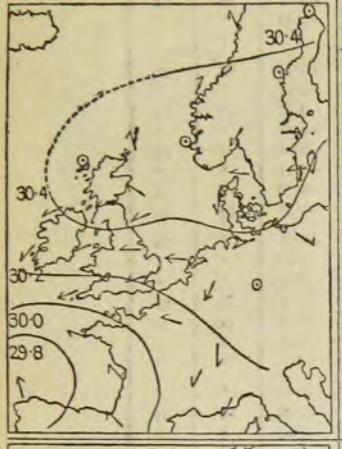
Temperature risen in England and France, but fallen elsewhere; readings ranging from 56° at Hurst Castle to 39° at Loughborough and 38° at Nairn.

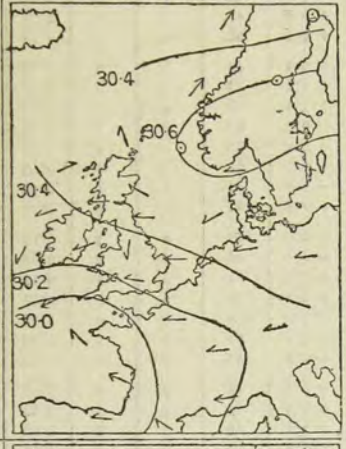
Wind light and variable in Scotland and South-Westerly in the west of Norway, but strong from South-East over the Bay of Biscay and our south-west coasts, and moderate from East elsewhere.

Sea rather rough at Valencia and Prawle Point, moderate to smooth elsewhere.

Barometer falling briskly in the west of France, but rising steadily over our Islands and Scandinavia. Pressure highest in Sweden, but large shallow depression over Bay of Biscay. Depression filling up during day.







Sunday, October 24.

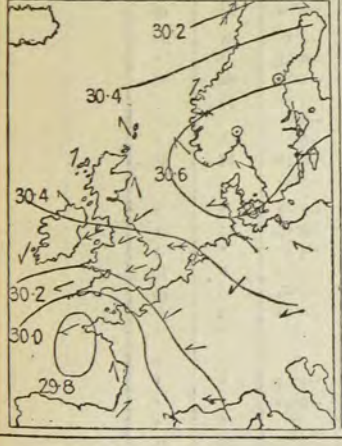
Weather showery in the Channel, but fair in most other places. Thunderstorm during day at Biarritz.

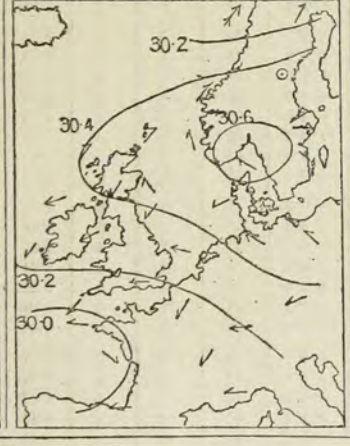
Temperature risen a little in Scotland and at some of the English stations, but fallen elsewhere; readings ranging from 54° at Scilly to 37° at Stornoway.

Wind South-easterly and Southerly in Scotland, the west of Norway and south-east of France. Easterly or North-easterly elsewhere, strong on our south and south-east coasts, but light or moderate in other places.

Sea rough at Scilly, Yarmouth, and Prawle Point; moderate to smooth elsewhere.

Barometer rising very generally. Pressure highest over Scandinavia. Another depression appearing over Bay of Biscay, travelling in an easterly direction during day.





Monday, October 25.

Weather fine in the west of our Islands, the Netherlands and north of Sweden, cloudy or overcast and elsewhere, with rain at Brest and in the eastern part of the Channel. Rain extending to the whole of the southern districts during the day. Thunderstorm in the evening in the south of France.

Temperature fallen a little in most places; readings ranging from 53° at Scilly and Jersey, to 37° at Nairn.

Wind moderate from South in Scotland, and the south-west of France, South-Westerly in the south of Norway, Easterly elsewhere; strong in force in the South-East, with a fresh gale at Yarmouth.

Sea rough at Yarmouth, Scilly, and Prawle Point, moderate to smooth elsewhere.

Barometer falling a little in the north-west of France and at Stornoway, but rise continuing in most other places. Pressure highest over Denmark and the south of Scandinavia. The depression over the Bay of Biscay somewhat deeper in morning, but dispersing during the day.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 169 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	53	40	51·0	44·6	47·7	+ 2·1	40	0	4	0·94	−0·04	*	*
	Stornoway	57	34	54·3	39·6	46·7	+ 1·5	43	7	3	0·09	−1·03	38	57
	Wick	54	32	52·0	41·9	46·8	+ 1·4	34	0	3	0·55	−0·10	*	*
1. SCOTLAND, E.	Nairn	56	32	51·3	37·6	44·3	− 1·3	35	12	5	0·17	−0·37	*	*
	Aberdeen	56	37	52·3	43·4	47·7	+ 2·3	40	0	5	1·07	+0·42	9	13
	Leith	56	34	52·9	42·3	47·4	+ 1·5	38	0	5	0·43	−0·02	*	*
2. ENGLAND, N.E.	Alnwick Castle	57	38	51·4	43·0	47·1	+ 1·2	36	0	4	0·71	+0·07	*	*
	Durham	57	35	52·4	41·8	46·9	+ 0·7	35	1	5	0·90	+0·22	12	17
	Shields	54	40	51·7	44·3	47·9	+ 1·2	41	0	3	0·39	−0·17	*	*
	Scarborough ℳ	57	44	53·3	47·6	50·4	+ 3·9	59	0	3	0·41	−0·30	*	*
	York	57	38	54·1	43·4	48·6	+ 1·0	46	0	3	0·50	−0·05	19	28
	Spurn Head	56	47	54·0	48·7	51·3	+ 3·7	65	0	1	0·04	?	*	*
3. ENGLAND, E.	Hillington ℳ	61	38	56·6	42·9	49·6	+ 1·7	53	0	1	0·24	−0·36	27	39
	Yarmouth	59	45	55·1	47·9	51·4	+ 2·4	66	0	3	0·44	−0·24	*	*
	Geldeston	62	38	56·8	43·2	49·8	+ 0·7	55	0	3	0·11	−0·51	19	27
	Cambridge	61	39	55·6	41·7	48·4	− 0·3	46	1	2	1·02	+0·52	12	17
	Rothamsted	58	35	54·1	42·6	48·2	+ 0·4	43	0	4	0·27	−0·42	*	*
	Ingatestone	57	40	54·3	44·6	49·3	+ 0·5	51	0	4	0·45	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	59	32	54·9	42·3	48·4	+ 0·4	45	0	3	0·76	+0·11	15	21
	Loughborough	59	36	55·9	42·3	48·9	+ 1·5	48	0	3	1·02	+0·35	*	*
	Leicester	58	35	54·8	42·9	48·7	+ 1·4	47	0	2	0·45	−0·15	16	23
	Cheadle ℳ	54	38	51·5	43·0	47·1	+ 0·6	36	0	4	0·45	−0·40	*	*
	Churchstoke ℳ	53	37	51·5	42·8	47·0	− 0·2	35	0	4	0·18	−0·64	8	11
	Hereford ℳ	61	38	54·5	44·4	49·3	+ 1·3	51	0	4	0·18	−0·47	*	*
	Cirencester	55	31	52·9	41·7	47·1	− 0·9	37	1	5	0·46	−0·26	16	23
	Oxford	57	36	54·4	43·0	48·5	+ 0·2	46	0	4	0·42	−0·18	14	20
5. ENGLAND, S.	London†	60	39	55·9	45·0	50·3	+ 1·0	58	0	3	0·10	−0·51	7	10
	Strathfield Turgiss ℳ	58	34	55·7	42·1	48·7	− 0·3	47	0	4	0·60	−0·02	*	*
	Dungeness	61	38	57·7	43·1	50·2	+ 0·3	57	0	6	0·47	−0·29	*	*
	Hastings (St. Leonard's)	59	44	56·6	47·9	52·1	+ 2·0	71	0	5	0·37	−0·45	21	30
	Southampton	62	35	57·9	45·1	51·3	+ 1·0	65	0	5	1·06	+0·32	14	20
	Hurst Castle	60	40	57·3	45·4	51·2	+ 0·7	64	0	5	1·14	+0·41	*	*
	Stowell ℳ	57	33	54·6	43·3	48·8	− 0·1	48	0	5	0·52	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	61	36	55·2	39·4	47·1	+ 0·2	47	7	2	0·20	−1·60	*	*
	Glasgow	54	32	50·5	41·2	45·7	+ 0·5	29	2	2	0·23	−0·68	10	15
	Ardrossan	56	39	53·1	43·0	47·9	+ 1·3	41	0	2	0·03	−0·92	*	*
	Douglas (Isle of Man)	57	37	54·2	44·4	49·2	+ 1·0	50	0	1	0·14	−0·85	33	48
7. ENGLAND, N.W.	Newton Reigny (Penrith)	60	32	52·8	38·8	45·6	− 0·1	39	9	1	0·06	−0·74	22	32
	Barrow-in-Furness	56	43	53·6	45·4	49·4	+ 1·0	52	0	2	0·24	−0·71	*	*
	Stonyhurst	54	39	52·5	43·1	47·7	+ 0·9	40	0	4	0·08	−1·16	22	32
	Blackpool ℳ	58	38	54·4	43·7	48·9	− 0·2	48	0	2	0·16	−0·80	25	36
	Manchester	57	39	53·7	44·0	48·7	+ 1·1	47	0	2	0·86	−0·09	*	*
	Liverpool Obsy (Bidston)	57	43	53·1	45·3	49·1	+ 0·2	50	0	3	0·93	+0·12	*	*
	Llandudno ℳ	55	43	53·4	46·2	49·7	− 0·5	54	0	0	—	−0·89	18	26
	Holyhead	55	42	53·9	47·6	50·7	+ 0·3	61	0	3	0·10	−0·90	*	*
8. ENGLAND, S.W.	Llandovery	54	37	53·9	43·9	48·8	− 0·5	48	0	5	0·36	−0·89	*	*
	Pembroke	56	47	54·3	48·7	51·4	− 0·2	66	0	5	0·41	−0·52	15	21
	Arlington (N. Devon)	56	39	53·6	44·4	48·9	− 0·1	48	0	5	0·84	−0·50	*	*
	Cullompton ℳ	59	34	55·7	43·7	49·5	+ 0·2	53	0	6	1·23	−0·34	9	13
	Falmouth	58	42	55·3	48·3	51·7	+ 0·2	68	0	6	1·22	−0·03	14	20
	Plymouth	58	36	56·1	44·3	50·0	− 1·0	56	0	5	1·13	+0·28	14	20
	Prawle Point	58	39	55·6	46·1	50·7	− 0·5	61	0	6	2·62	?	*	*
9. IRELAND, N.	Malin Head	53	37	51·7	44·0	47·7	+ 0·7	40	0	2	0·05	?	*	*
	Londonderry	57	34	54·5	39·4	46·7	− 0·1	44	7	1	0·02	−0·96	*	*
	Mullaghmore	55	41	52·9	44·0	48·3	+ 1·3	44	0	3	0·22	−0·73	*	*
	Belmullet	56	40	52·4	43·7	47·9	− 1·7	41	0	2	0·35	?	*	*
	Markree Castle	56	30	52·6	38·3	45·2	− 1·2	38	10	1	0·14	−0·73	28	41
	Brookeborough	56	29	53·1	37·3	45·0	− 1·0	41	13	1	0·20	?	*	*
	Armagh	54	33	52·5	40·6	46·4	− 0·1	37	4	4	0·16	−0·52	22	32
	Donaghadee	54	32	52·9	43·3	48·0	− 1·1	42	0	2	0·08	−0·67	*	*
	Edgeworthstown	53	31	51·7	39·7	45·5	− 0·6	34	6	1	0·28	−0·42	*	*
10. IRELAND, S.	Dublin	54	36	53·0	45·9	49·4	+ 1·2	52	0	2	0·46	−0·23	14	20
	Parsonstown	55	32	53·0	39·6	46·1	− 0·9	39	7	1	0·33	−0·69	21	30
	Kilkenny	56	31	54·1	42·3	48·0	+ 0·5	42	0	1	0·35	−0·33	*	*
	Waterford	55	31	53·7	42·9	48·1	− 1·7	43	0	1	0·82	−0·12	*	*
	Roche's Point	58	43	55·3	45·3	50·2	− 0·3	57	0	3	1·12	+0·17	*	*
	Valencia	56	39	54·7	45·1	49·8	− 1·4	55	0	3	0·80	−0·57	29	41
	Killarney	55	33	53·0	38·9	45·7	− 3·9	39	9	3	0·85	?	*	*
	Foynes	55	37	?53·1	?42·0	47·4	− 0·7	38	0	1	0·33	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	59	47	56·0	50·9	53·4	− 0·1	80	0	6	1·17	+0·30	*	*
	Jersey (Noirmont)	59	47	56·9	49·1	52·9	− 0·1	76	0	7	1·69	+0·71	17	24

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 44.] *New Series.* WEEK ENDING MONDAY, 1ST NOVEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 176.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	31	52·9	42·6	47·6	4 above.	39	0	1645	−175	669	+115
	1. SCOTLAND, EAST	61	29	54·2	42·5	48·2	4 above.	43	0	2229	− 88	743	+153
	2. ENGLAND, N.E.	60	43	53·7	47·2	50·4	5 above.	59	0	2440	− 54	697	+187
	3. ENGLAND, EAST	63	40	55·7	46·9	51·2	5 above.	64	0	2921	+ 55	750	+217
	4. MIDLAND COUNTIES	63	42	54·8	46·9	50·7	5 above.	61	0	2852	+ 26	721	+179
	5. ENGLAND, SOUTH	65	43	56·9	49·4	53·1	5 above.	78	0	3182	+ 75	590	+198
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	57	33	53·2	46·5	49·8	5 above.	55	0	2222	−222	579	+152
	7. ENGLAND, N.W.	61	30	54·1	45·9	49·8	3 above.	55	0	2540	− 67	612	+210
	8. ENGLAND, S.W.	62	42	55·9	48·8	52·3	4 above.	72	0	2908	− 81	490	+249
	9. IRELAND, NORTH	59	32	53·8	44·0	48·8	3 above.	48	0	2381 *	−150	495	+123
	10. IRELAND, SOUTH	60	30	55·1	45·0	49·9	3 above.	55	0	2761	−112	401	+146
	— CHANNEL ISLANDS	61	44	57·5	50·8	54·1	3 above.	85	0	3273	− 2	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 176.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	4	5 less.	210	+20	28·1	− 1·4	24	38	1241	+ 84	31	+ 3
	1. SCOTLAND, EAST	4	3	3 less.	165	+ 3	20·3	− 2·0	6	9	1262	− 51	32	0
	2. ENGLAND, N.E.	4	5	2 less.	164	+ 7	22·9	− 0·3	7	11	1046	−152	26	− 4
	3. ENGLAND, EAST	3	4	3 less.	153	− 8	19·7	− 3·3	6	9	1398	− 55	35	− 2
	4. MIDLAND COUNTIES	5	4	3 less.	163	+ 6	26·5	+ 1·5	9	13	1157	−145	29	− 4
	5. ENGLAND, SOUTH	5	6	1 less.	153	+ 3	22·8	− 0·7	10	15	1394	− 3	35	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	9	2 less.	176	+ 2	36·2	+ 2·7	13	20	1119	−143	28	− 4
	7. ENGLAND, N.W.	4	11	2 more.	167	+ 4	34·2	+ 4·5	15	22	1150	−110	29	− 3
	8. ENGLAND, S.W.	6	4	7 less.	172	0	34·7	− 1·6	15	23	1331	−175	34	− 4
	9. IRELAND, NORTH	4	3	5 less.	185	− 8	32·7	+ 1·2	19	28	996	−180	25	− 5
	10. IRELAND, SOUTH	6	8	1 less.	182	+ 2	36·4	+ 3·0	21	31	1155	−193	29	− 5
	— CHANNEL ISLANDS	6	5	4 less.	198	+13	28·3	+ 0·8	28	41	1681	−101	43	− 2

General Remarks.

Weather has been cloudy or dull generally, with several, but not heavy, falls of rain.

Temperature has been above the mean in all districts, the excess ranging from 3° in Ireland, the "Channel Islands", and the north-west of England, to 5° over north-eastern, eastern, central, and southern England, and also in the west of Scotland. The highest of the maxima, which were registered in most places on the 29th October, varied between 57° (in "Scotland, W."), and 65° (in "England, S."). The lowest of the minima, which were recorded during the earlier days of the period, ranged from 29° to 33° in Scotland, from 30° to 32° in Ireland, and from 30° to 43° in England. In the "Channel Islands" the lowest reading was 47°. During the latter part of the time the minima were high for the season, the thermometer at many stations not falling as low as 50°.

Rainfall has been a little more than the mean in "England, N.W.", but rather less in all other districts.

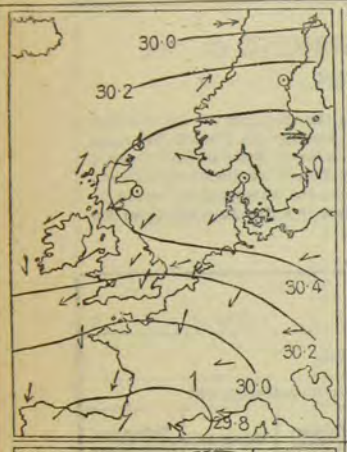
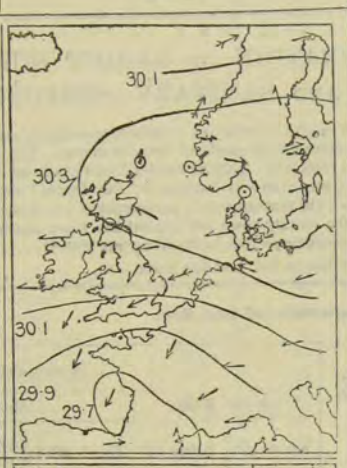
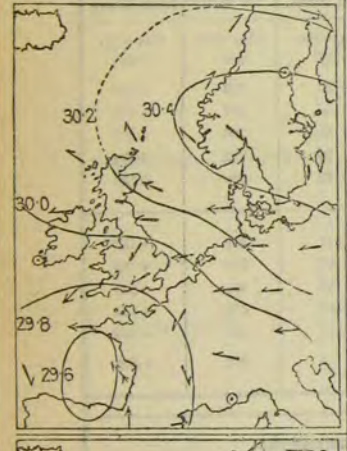
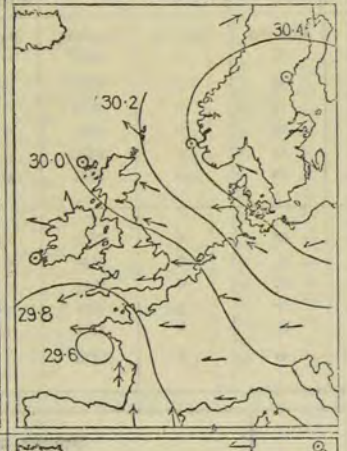
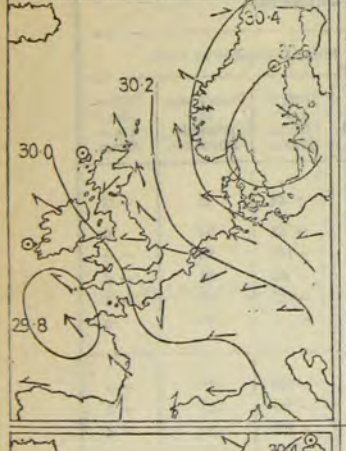
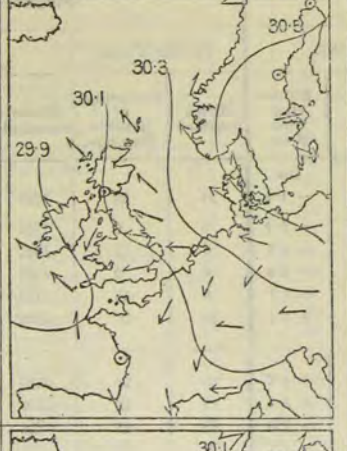
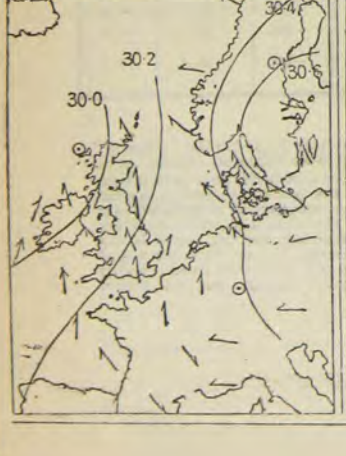
Bright sunshine shows a decided decrease except in "England, S.W.", the "Channel Islands", and "Ireland, S." The percentages of the possible amount of duration ranged from 9 to 15 in the "Wheat-producing" districts, and from 20 to 31 in the "Grazing" districts, while in "Scotland, N." 38 % was recorded, and in the "Channel Islands" 41 %.

Depressions observed.—During the whole of this period barometric pressure has been highest over Sweden and the Baltic, while towards the end of the time it became relatively high over Germany and France. No depressions appeared immediately over the United Kingdom, but during the earlier part of the week a disturbance, which subsequently travelled slowly away to the north-westward, lay over the Bay of Biscay and produced fresh or strong Easterly winds on all our coasts. During the latter part of the period some depressions skirted our extreme west and north-west coasts, causing fresh or strong Southerly and South-Westerly winds in the west and moderate breezes from the same quarters elsewhere.

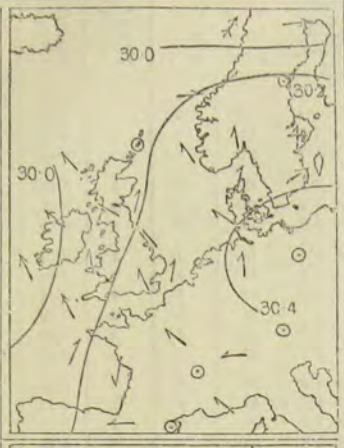
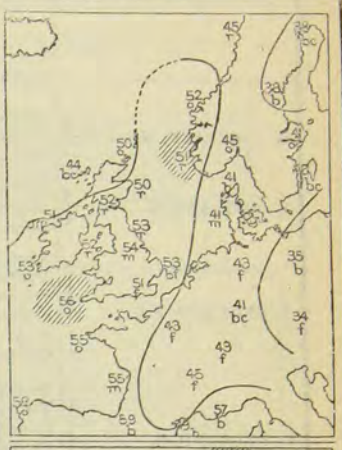
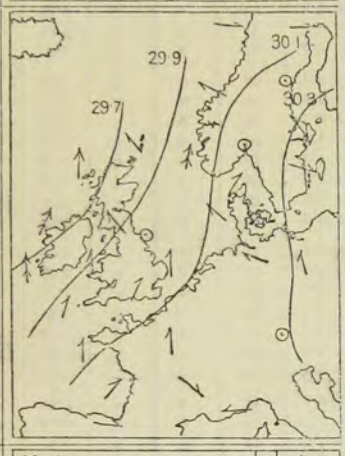
* The corresponding value for the week ending October 18th, should have been "2296".

E 24114. 350.—11/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, October 26.** *Weather* fine in the west and north, but cloudy elsewhere, with rain at Lyons and passing showers at Leith. Rain falling later at several of our extreme southern stations, and thunderstorms occurring in the south of France. *Temperature* fallen generally; readings over our Islands ranging from 53° at Scilly and Jersey to 38° at Parsonstown and 34° at Nairn. *Wind* light from South in the north of Scotland and strong to a gale from South-West or West in the north of Scandinavia, but Easterly or North-Easterly elsewhere; strong in force in the south and south-east of England. *Sea* rough at Yarmouth and rather rough at Spurn Head and Prawle Point, but moderate to smooth elsewhere. *Barometer* falling generally. Large anticyclone lying over the North Sea, Denmark, and the south of Scandinavia, with a large depression over the south of France and the north of Spain. Fall continuing all day.	
		**Wednesday, October 27.** *Weather* fine in Ireland and the north of Sweden, but cloudy or overcast elsewhere, with rain at Brest and Paris and passing showers at Jersey. Rain falling later at several of our southern stations, and aurora seen in the extreme north. *Temperature* risen on our northern coasts, but fallen slightly elsewhere; readings over our Islands ranging from 50° at Jersey to 40° at Valencia. *Wind* light Westerly in Sweden, but moderate South-Easterly in Scotland and strong from North-East over the south of our Islands and north of France. *Sea* rough off the east of England and rather rough at Aberdeen and the mouth of the English Channel, but moderate to smooth elsewhere. *Barometer* falling at all but the northern Scandinavian stations. Anticyclone still lying over the south of Scandinavia, with an elongated depression over the Bay of Biscay. Depression subsequently moving northwards, and barometer rising in west of France as well as in Sweden.	
		**Thursday, October 28.** *Weather* dull in the eastern and north-western parts of our Islands and France, but fair or fine elsewhere. Rain falling later at many of our western and southern stations. *Temperature* risen a little over the United Kingdom, but fallen on the Continent; readings over our Islands ranging from 57° at Prawle Point to 39° at Nairn. *Wind* light Westerly in Sweden, and strong Southerly in the north-east of Scotland, but moderate to fresh from South-East or East elsewhere. *Sea* rough or rather so on the east coasts of Great Britain as well as at Scilly, but moderate to smooth elsewhere. *Barometer* rising at all but our extreme northern stations. Anticyclone still lying over the south of Sweden, with a shallow depression off the mouth of the English Channel. Depressions subsequently moving north-westwards over the Atlantic.	
		**Friday, October 29.** *Weather* rainy in the east of Scotland and the north-east of England, and dull on our western coasts, but fair or fine elsewhere. Rain falling later at several of the western stations. *Temperature* risen at all but the northern Scandinavian stations; readings over our Islands ranging from 5° at Hurst Castle and Dungeness to 41° at Nairn. Subsequently rising to 63° at Oxford and Cambridge, and to 65° in London. *Wind* light Easterly in Germany and South-Easterly on the eastern shores of the North Sea, but Southerly or South-Westerly elsewhere; fresh in force at some of our southern stations. *Sea* rough at Sumburgh Head and rather rough at Valencia and Scilly, but moderate to smooth elsewhere. *Barometer* rising at all but the Norwegian, Danish, and Scotch stations. Anticyclone over Scandinavia extending southwards, and depressions beginning to move along our extreme western coasts. No important change during day.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, October 30.** *Weather* rainy in the west of Norway and the northern parts of Ireland and England and dull on our south-west coasts, but generally fine elsewhere. Rain falling in west later. *Temperature* fallen a little over France and Germany and also in the north of Ireland, but risen elsewhere; readings over our Islands now ranging from 56° in the south-west of England to 44° at Stornoway. Maxima over England rather lower than on previous day. *Wind* strong from South or South-West in Scandinavia, and light from the same quarters in the north and east of our Islands, but South-Easterly or Easterly elsewhere. South-Easterly winds subsequently freshening on our south-west coasts. *Sea* rather rough at Scilly, but slight or smooth generally. *Barometer* falling briskly in Scandinavia and slightly in the south-west of our Islands, but rising in most other localities. Pressure highest over the Baltic, with a depression off the north-west of Norway and relatively low readings to the westward of Ireland. Fall taking place generally later.	
		**Sunday, October 31.** *Weather* fine at several of our western stations, but cloudy in the east, with rain at Aberdeen. Showers falling later in many parts of our Islands. *Temperature* fallen in the western parts of our Islands and Scandinavia, but risen elsewhere; readings over the United Kingdom ranging from 57° at Hurst Castle and Dungeness to 45° at Parsonstown. *Wind* moderate Westerly in Sweden and the north of Norway and light South-Westerly in the south of our Islands, but Southerly or South-Easterly elsewhere. Southerly gale blowing later in the west and south of Ireland. *Sea* rather rough at Stornoway and Valencia, but moderate to smooth elsewhere. *Barometer* falling generally. Pressure high over Central Europe, with a somewhat shallow depression off the west of Scotland. New depression passing along our extreme western coasts later.	
		Monday, November 1. *Weather* rainy in the south-east of England, showery on our extreme north-west coasts, and foggy or misty at some of the French and German stations, but fair or fine elsewhere. Rain falling later on all but our south-east coasts. *Temperature* fallen generally; readings over our Islands ranging from 57° at Dungeness to 44° at Parsonstown. *Wind* strong South-Easterly on the eastern shores of the North Sea, light Easterly in Germany, and moderate Westerly at the mouth of the Channel, but Southerly or South-Westerly elsewhere; strong in force at some of our western stations. *Sea* rough at Sumburgh Head and Scilly, and rather rough at Valencia, but moderate to smooth elsewhere. *Barometer* falling at all but the Swedish and southern French stations. Pressure highest over the Gulf of Bothnia, with a depression off the west of Scotland. New disturbance appearing off the west of Ireland in evening.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟹ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 173 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	54	43	51·7	45·6	48·6	+ 4·4	46	0	4	0·30	−0·69	*	*
	Stornoway	55	33	53·0	38·9	45·7	+ 1·8	39	9	5	0·82	−0·28	24	38
	Wick	58	31	54·0	43·4	48·5	+ 4·7	46	0	1	0·01	−0·66	*	*
1. SCOTLAND, E.	Nairn	58	29	53·7	38·4	45·8	+ 2·0	42	10	1	0·01	−0·52	*	*
	Aberdeen	56	39	53·1	45·0	48·9	+ 5·0	48	0	5	0·41	−0·26	6	9
	Leith	61	41	55·9	44·0	49·8	+ 5·9	55	0	5	0·40	−0·06	*	*
2. ENGLAND, N.E.	Alnwick Castle	57	44	52·6	46·9	49·7	+ 5·3	54	0	5	0·64	−0·04	*	*
	Durham	58	43	53·0	45·1	48·9	+ 4·4	48	0	3	0·86	+0·18	7	11
	Shields	58	46	53·4	47·6	50·4	+ 5·2	59	0	3	0·41	−0·16	*	*
	Scarborough ℳ	58	46	53·7	48·1	50·8	+ 6·1	62	0	5	0·38	−0·34	*	*
	York	60	44	54·9	47·0	50·8	+ 5·3	62	0	5	0·40	−0·14	7	11
	Spurn Head	59	46	54·6	48·7	51·6	+ 5·7	67	0	2	0·22	?	*	*
3. ENGLAND, E.	Hillington ℳ	62	42	55·4	45·6	50·4	+ 4·2	59	0	3	0·34	−0·28	5	7
	Yarmouth	60	43	54·9	47·3	51·0	+ 4·0	63	0	3	0·23	−0·47	*	*
	Geldeston	62	40	56·0	46·6	51·2	+ 3·9	64	0	3	0·16	−0·46	7	10
	Cambridge	63	43	56·6	46·3	51·3	+ 4·8	65	0	2	0·35	−0·14	6	9
	Rothamsted	62	42	55 5	46·0	50·6	+ 4·8	60	0	5	0·75	+0·07	*	*
	Ingatestone	63	44	55·8	49·4	52·5	+ 5·7	74	0	4	0·25	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	59	44	54·6	46·6	50·5	+ 4·2	60	0	5	0·22	−0·38	6	9
	Loughborough	62	44	55·1	47·4	51·1	+ 5·8	64	0	3	0·26	−0·37	*	*
	Leicester	62	44	55·1	47·3	51·1	+ 5·9	64	0	3	0·31	−0·35	7	10
	Cheadle ℳ	58	42	52·1	45·3	48·6	+ 4·1	46	0	6	0·56	−0·24	*	*
	Churchstoke ℳ	57	42	52·6	45·5	49·0	+ 4·2	49	0	6	0·35	−0·47	8	12
	Hereford ℳ	62	44	55·8	47·9	51·7	+ 5·9	68	0	4	0·44	−0·20	*	*
	Cirencester	60	42	56·6	47·0	51·7	+ 5·9	68	0	5	0·57	−0·15	13	19
	Oxford	63	43	56·1	48·1	52·0	+ 6·0	70	0	4	0·48	−0·10	11	16
5. ENGLAND, S.	London†	65	46	57·1	48·4	52·6	+ 5·7	74	0	4	0·44	−0·14	7	10
	Strathfield Turgiss ℳ	61	45	56·7	47·8	52·1	+ 5·3	71	0	3	0·59	−0·02	*	*
	Dungeness	62	45	57·9	49·9	53·8	+ 5·9	83	0	4	0·18	−0·60	*	*
	Hastings (St. Leonard's)	61	46	57·2	50·2	53·6	+ 5·3	81	0	5	0·31	−0·50	10	15
	Southampton	63	46	57·4	49·9	53·5	+ 5·1	81	0	6	0·84	+0·13	13	19
	Hurst Castle	61	48	56·9	51·0	53·9	+ 5·2	83	0	5	0·99	+0·28	*	*
	Stowell ℳ	60	43	55·1	48·8	51·9	+ 4·8	69	0	5	0·89	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	57	33	53·9	44·6	48·7	+ 3·3	47	0	4	1·29	−0·64	*	*
	Glasgow	56	43	53·3	46·9	50·0	+ 7·1	56	0	5	0·59	−0·31	12	19
	Ardrossan	54	42	52·7	46·4	49·5	+ 4·8	53	0	5	0·46	−0·49	*	*
	Douglas (Isle of Man)	57	41	53·7	48·2	50·9	+ 5·2	62	0	5	1·12	+0·11	14	21
7. ENGLAND, N.W.	Newton Reigny (Penrith)	58	30	53·1	42·1	47·4	+ 3·6	38	0	5	0·95	+0·15	12	18
	Barrow-in-Furness	55	41	53·3	46·4	49·8	+ 3·4	55	0	5	1·89	+0·94	*	*
	Stonyhurst	56	43	52·9	45·4	49·0	+ 3·7	49	0	4	1·25	+0·07	13	20
	Blackpool ℳ	57	36	54·1	44·5	49·2	+ 2·1	50	0	5	1·38	+0·46	15	23
	Manchester	58	45	54·2	46·8	50·1	+ 4·3	57	0	3	0·62	−0·28	*	*
	Liverpool Obsy (Bidston)	57	40	54·1	46·1	50·0	+ 3·1	56	0	4	0·71	−0·06	*	*
	Llandudno ℳ	58	45	55·1	47·9	51·4	+ 3·0	66	0	5	0·85	0·00	18	27
	Holyhead	61	45	55·6	47·7	51·5	+ 2·8	67	0	4	1·03	+0·06	*	*
8. ENGLAND, S.W.	Llandovery	60	44	55·6	47·0	51·2	+ 3·7	64	0	6	0·65	−0·59	*	*
	Pembroke	58	42	54·9	48·4	51·6	+ 1·8	67	0	6	0·41	−0·52	20	30
	Arlington (N. Devon)	58	43	54·6	47·1	50·7	+ 3·9	61	0	4	0·46	−0·91	*	*
	Cullompton ℳ	60	44	57·2	49·8	53·4	+ 5·9	80	0	5	0·24	−0·63	13	19
	Falmouth	59	44	55·8	49·4	52·5	+ 2·6	74	0	7	0·41	−0·86	13	19
	Plymouth	62	45	57·6	50·3	53·8	+ 4·4	83	0	5	0·20	−0·65	13	19
	Prawle Point	59	45	55·9	49·7	52·7	+ 2·8	75	0	6	0·35	?	*	*
9. IRELAND, N.	Malin Head	56	43	52·7	46·1	49·3	+ 3·4	51	0	4	0·28	?	*	*
	Londonderry	58	33	54·4	43·1	48·6	+ 3·3	46	0	3	0·21	−0·77	*	*
	Mullaghmore	57	42	54·3	45·7	49·9	+ 4·5	55	0	3	0·16	−0·87	*	*
	Belmullet	55	35	53·1	41·1	43·9	− 1·5	38	3	4	0·48	?	*	*
	Markree Castle	57	32	54·6	41·3	47·8	+ 3·0	44	2	4	0·16	−0·69	19	29
	Brookeborough	58	32	54·1	43·0	48·4	+ 4·2	45	0	2	0·35	?	*	*
	Armagh	59	38	54·0	44·5	49·1	+ 4·1	59	0	4	0·32	−0·33	18	27
	Donaghadee	57	46	54·3	48·0	51·1	+ 3·5	64	0	5	0·66	−0·09	*	*
	Edgeworthstown	57	38	53·1	43·3	48·1	+ 3·3	43	0	5	0·33	−0·42	*	*
10. IRELAND, S.	Dublin	58	47	55·0	48·8	51·8	+ 5·4	69	0	6	0·56	−0·09	19	28
	Parsonstown	58	33	54·6	41·9	48·1	+ 2·8	43	0	5	0·41	−0·28	19	28
	Kilkenny	59	36	55·7	42·7	49·0	+ 3·3	49	0	5	0·70	+0·05	*	*
	Waterford	58	43	55·0	47·0	50·9	+ 2·6	62	0	5	1·10	+0·17	*	*
	Roche's Point	57	41	55·6	46·1	50·7	+ 1·5	61	0	6	1·29	+1·33	*	*
	Valencia	59	36	55·9	44·6	50·1	+ 0·2	57	0	6	1·14	−0·20	25	37
	Killarney	59	30	53·9	42·8	48·2	+ 0·1	43	0	6	0·64	?	*	*
	Foynes	60	37	55·0	45·8	50·3	+ 4·1	58	0	6	0·71	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	47	56·9	50·0	53·4	+ 1·5	89	0	6	0·31	−0·56	*	*
	Jersey (Noirmont)	61	48	58·1	51·6	54·8	+ 3·9	90	0	5	0·74	−0·24	28	41

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. III. No. 45.] *New Series.* WEEK ENDING MONDAY, 8TH NOVEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 180.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	31	47·3	38·4	42·9	0 (average).	21	10	1666	−175	679	+107
	1. SCOTLAND, EAST	56	32	49·1	38·1	43·6	1 above.	28	11	2257	− 85	754	+144
	2. ENGLAND, N.E.	55	32	48·5	38·5	43·5	0 (average).	25	10	2465	− 53	707	+181
	3. ENGLAND, EAST	59	28	50·5	37·5	44·0	1 below.	33	13	2954	+ 60	763	+212
	4. MIDLAND COUNTIES	58	26	49·3	36·2	42·8	1 below.	30	16	2881 *	+ 27	737	+176
	5. ENGLAND, SOUTH	60	27	52·3	39·3	45·8	0 (average).	38	8	3220	+ 77	598	+195
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	55	35	48·2	40·4	44·3	1 above.	23	4	2245	−227	583	+143
	7. ENGLAND, N.W.	56	32	48·9	40·6	44·8	1 below.	25	4	2565	− 71	616	+203
	8. ENGLAND, S.W.	58	28	51·2	39·6	45·4	2 below.	34	7	2942	− 89	497	+253
	9. IRELAND, NORTH	55	28	49·0	38·4	43·7	1 below.	27	10	2408	−154	505	+121
	10. IRELAND, SOUTH	59	28	50·8	38·6	44·7	1 below.	33	10	2794	−120	411	+147
	— CHANNEL ISLANDS	56	42	52·7	46·5	49·6	0 (average).	53	0	3326	− 5	202	+109

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 180.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	11	2 more.	216	+20	29·2	− 1·2	11	19	1252	+ 82	31	+ 2
	1. SCOTLAND, EAST	4	6	0 (average).	169	+ 3	20·9	− 2·0	23	38	1285	− 46	32	− 1
	2. ENGLAND, N.E.	4	20	13 more.	168	+ 8	24·9	+ 1·1	16	25	1062	−149	26	− 4
	3. ENGLAND, EAST	5	8	2 more.	158	− 7	20·5	− 3·1	23	36	1421	− 52	35	− 2
	4. MIDLAND COUNTIES	5	8	2 more.	168	+ 8	27·3	+ 1·7	15	23	1172	−145	29	− 4
	5. ENGLAND, SOUTH	6	17	10 more.	159	+ 6	24·6 *	+ 0·5	17	26	1411	− 2	35	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	18	6 more.	181	+ 3	38·0	+ 3·6	17	28	1136	−138	28	− 3
	7. ENGLAND, N.W.	6	19	10 more.	173	+ 6	36·2 *	+ 5·7	16	26	1165 *	−107	29	− 3
	8. ENGLAND, S.W.	6	25	14 more.	178	+ 2	37·2	− 0·1	17	27	1348	−172	34	− 4
	9. IRELAND, NORTH	6	13	5 more.	191	− 7	34·0	+ 1·6	23	36	1019	−172	25	− 4
	10. IRELAND, SOUTH	6	14	6 more.	188	+ 4	38·1 *	+ 3·8	24	39	1179	−185	29	− 5
	— CHANNEL ISLANDS	7	21	11 more.	205	+15	30·4	+ 2·0	16	24	1697	−102	43	− 2

General Remarks.

Weather has been in a very unsettled and rainy condition in all parts of the Kingdom. The rainfall over southern, south-western, and northern England has been unusually heavy, especially in the neighbourhood of Durham and Alnwick.

Temperature has continued above the mean in the east and west of Scotland, but in all other parts of our Islands it has either been a little below its normal value or just equal to it. The highest of the maxima, which were registered on the 3rd or 4th, varied from 52° in "Scotland, N." to 60° in "England, S." The lowest of the minima, which were recorded in most places on the 8th, ranged from 26° to 32° in England and Ireland, and from 31° to 35° in Scotland; in the "Channel Islands" the lowest reading was 42°.

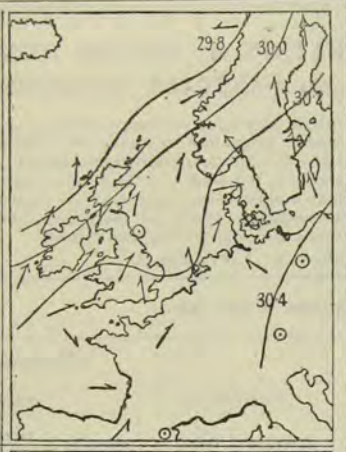
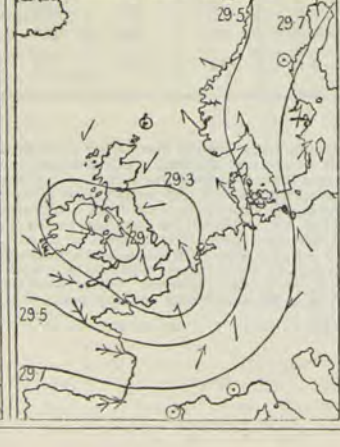
Rainfall has been equal to the mean in "Scotland, E.", but in all other districts the mean has been exceeded; over the greater part of England the excess has been very large.

Bright sunshine has been more prevalent in most districts than it was last week, the percentages of the possible amount of duration varying from 39 in "Ireland, S." and 38 in "Scotland, E." to 19 in "Scotland, N."

Depressions observed.—During the earlier part of the period the barometer was highest at the continental stations, while depressions skirted our extreme west and north-west coasts, that of the 3rd being very deep and causing very strong gales in all our western and northern districts, and moderate or fresh gales in most other parts of the Kingdom. During the latter part of the week a depression which had been formed over the central parts of our Islands on the night of the 5th—6th, moved slowly in an east-north-easterly and north-easterly direction over the North Sea, and subsequently disappeared over Scandinavia. This disturbance produced moderate to strong North-Easterly or Northerly gales on our northern and western coasts, and strong Westerly winds or gales at our southern stations. At the end of the period another depression had appeared off our north-west coasts and the winds in our Islands had returned to the South-Westward.

A 24181. 350.—11/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, November 2.** *Weather* fine over the greater part of our Islands, but dull at the Continental stations, with fog over Germany, the Netherlands, and the south of Denmark. Rain falling later on our extreme western coasts, and aurora seen in the north of Scotland at night. *Temperature* fallen a few degrees over the United Kingdom and France, but risen elsewhere; readings over our Islands ranging from 55° at Hurst Castle and Dungeness to 40° at Parsonstown. *Wind* moderate Westerly in the south-west of our Islands and west of France, and South-Westerly on our north and east coasts, but strong from South or South-East on the eastern shores of the North Sea. Subsequently backing to South in the extreme west, and freshening. *Sea* rough at Scilly and rather rough at Stornoway, but moderate to smooth elsewhere. *Barometer* rising at all but the Scandinavian stations. Pressure high over Central and Southern Europe, with a large area of low readings to the northward of our Islands. Fall taking place later on our extreme west coasts.	
		Wednesday, November 3. *Weather* rainy at nearly all our western and northern stations, but fair or fine elsewhere, with, however, fog over Gormany and the Netherlands. Rain extending to our east coasts later. *Temperature* risen in the west and north of our Islands, but fallen at our eastern and the Continental stations; readings over the United Kingdom ranging from 56° at Valencia to 39° at Dungeness and Cambridge. *Wind* Southerly or South-Westerly in our Islands, but South-Easterly on the eastern shores of the North Sea; strong to a gale on our western and northern coasts. Gale subsequently extending eastwards, but wind veering to West in Ireland. *Sea* high at Stornoway and Valencia, and rough in the south-west, west, and extreme north. *Barometer* falling generally—rapidly on our western and northern coasts. Pressure still high over Central and Southern Europe, with a deep depression off the west of Scotland. Depression subsequently moving northwards, but subsidiary disturbances appearing over Ireland and England.	
		Thursday, November 4. *Weather* fair over the greater part of our Islands, but showery on our extreme north-west coasts and dull and unsettled at many of the Continental stations. Showers falling later at all our western stations, and aurora seen in north of Scotland at night. *Temperature* fallen in our Islands, Germany, and the east of France, but risen elsewhere; readings over the United Kingdom ranging from 52° at Scilly to 38° at Donaghadee and Oxford. Frost occurring in the north of Scotland at night. *Wind* Southerly in Sweden and Denmark, South-Westerly or Westerly in our Islands, and North-Westerly in the north of France, strong in force on the eastern shores of the North Sea, but moderate or fresh elsewhere. *Sea* rather rough on our extreme south-west, west, and north coasts. *Barometer* falling at most of the Continental stations, but rising in our Islands. Pressure highest over the Peninsula, with a large area of low readings to the westward of Norway and the northward of our Islands. Slight fall taking place later in many parts of the United Kingdom.	
		**Friday, November 5.** *Weather* fine on the north and east coasts of Great Britain and also over the greater part of Ireland, but cloudy or overcast elsewhere, with rain at our western, southern, and some of the Continental stations. Rain falling generally later, and lightning seen in London and at Dungeness at night. *Temperature* risen in Germany and the south of our Islands, but fallen elsewhere; readings over the United Kingdom ranging from 53° at Dungeness to 33° at Stornoway. *Wind* Westerly in Ireland and the south-west of England, and South-Easterly in the north of England, but South-Westerly or Southerly elsewhere; moderate or fresh in force generally. Subsequently increasing to strong breeze over English Channel. *Sea* rather rough at the mouth of the Channel, but moderate to smooth elsewhere. *Barometer* falling at all but our extreme northern stations. Pressure highest in Portugal, but relatively high over the southern parts of France and Germany, with some shallow disturbances over our western coasts. Disturbances in west subsequently moving eastwards and growing much deeper.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

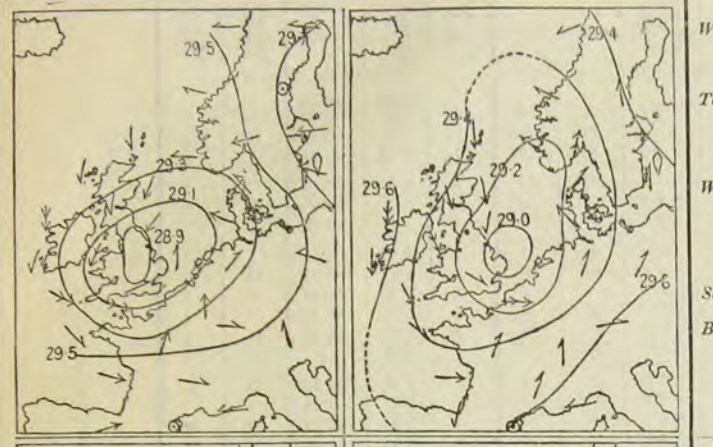
Weather

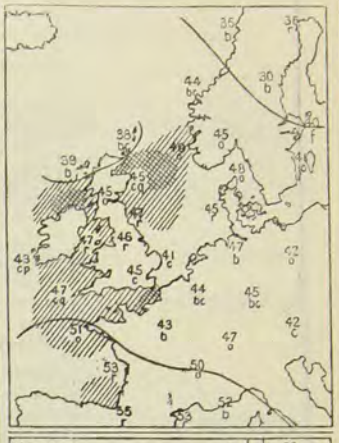
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, November 6.

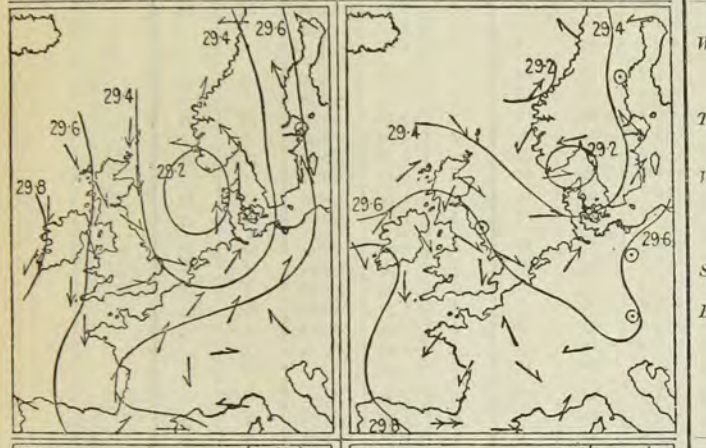
Weather fine in the north of Scandinavia and the extreme north and west of our Islands, but cloudy elsewhere, with rain in many places. Improving weather extending later to all but our most eastern stations.

Temperature risen several degrees in the north of our Islands and the south of France, but fallen elsewhere; readings over the United Kingdom ranging from 49° at Hurst Castle and Dungeness to 39° at York and Loughborough and to 38° at Sumburgh Head.

Wind strongly South-Easterly in Denmark and North-Easterly in the north of our Islands, but North-Westerly gales reported on our south-west coasts, and Westerly gales in the south. Wind subsequently backing to North on our northern coasts, and gales in south subsiding.

Sea high off the east of Scotland as well as at Malin Head and Holyhead, and rough in most other localities.

Barometer rising in the north of Scandinavia and the extreme west of our Islands, but falling elsewhere. Pressure relatively high over Sweden and Spain, with a well marked depression over northern and central England. Depression subsequently moving eastwards and barometer rising in most parts of our Islands.



Sunday, November 7.

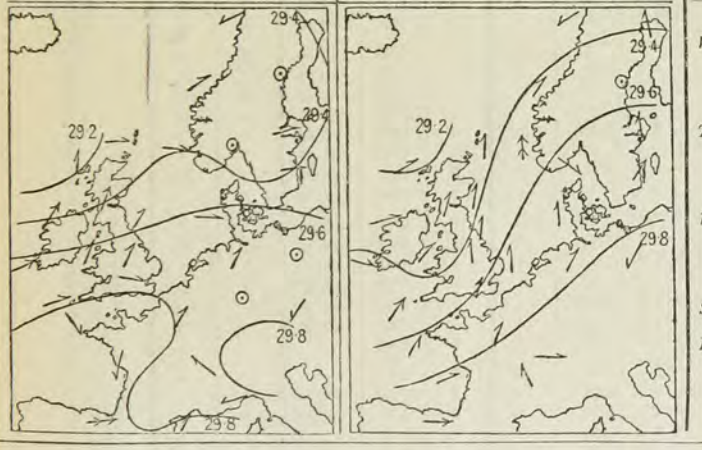
Weather rainy in Sweden, the south of France, and the north of Spain, and showery in the north of Ireland, but fair or fine elsewhere. Rain setting in later on our extreme north-west coasts.

Temperature fallen generally; readings over our Islands ranging from 48° at Scilly to 35° at Parsonstown. Sharp frost occurring over central England at night.

Wind moderate to strong from North or North-West over our Islands, but light from South-West in France and the Netherlands, and strong from South in Sweden and Denmark. Subsequently backing to South-West on our extreme north-west coasts.

Sea rather rough on our east and west coasts, but slight in the south.

Barometer falling in Scandinavia, Denmark, and the south of France, but rising elsewhere. Pressure relatively high over Sweden and also to the westward of our Islands, with depression of previous day now lying off the west of Denmark. Depression subsequently moving north-eastwards, but new disturbance approaching our north-west coasts.



Monday, November 8.

Weather rainy in the south of France and north of Ireland, and showery at several of our western stations, but fair or fine elsewhere. Showers falling later in the north, and lunar halos seen in London and at Oxford in evening.

Temperature risen a little on our western and northern coasts, but fallen elsewhere; readings over our Islands varying from 49° at Valencia and Scilly to 33° over central England. Sharp frost occurring at night over the inland parts of Ireland.

Wind North-Westerly or Northerly over the Channel and North of France, but South-Westerly elsewhere; strong in force on our extreme north-west coasts. Subsequently veering to West or North-West in Ireland.

Sea rather rough off the west of Ireland, but moderate to smooth elsewhere.

Barometer falling on our western and northern coasts and also in Sweden, but rising elsewhere. Pressure highest over the Peninsula, with a depression to the north-westward of our Islands. Subsidiary disturbances subsequently forming over our western coasts.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇛ = a heavy gale; ➔ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 177 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	51	35	47·6	40·0	43·8	+ 0·7	21	6	6	1·38	+0·40	*	*
	Stornoway	52	31	46·4	36·9	41·7	− 2·0	12	21	7	1·34	+0·24	11	19
	Wick	52	34	47·9	38·3	43·1	+ 0·6	23	10	5	0·54	−0·14	*	*
1. SCOTLAND, E.	Nairn	56	32	49·3	36·7	43·0	+ 1·0	29	15	4	0·27	−0·26	*	*
	Aberdeen	53	33	48·4	37·7	43·1	+ 0·6	26	12	5	0·78	+0·06	23	38
	Leith	56	35	49·6	39·9	44·8	+ 2·4	28	6	2	0·69	+0·22	*	*
2. ENGLAND, N.E.	Alnwick Castle	52	34	46·9	38·1	42·5	− 0·5	20	11	5	3·42	+2·70	*	*
	Durham	55	32	47·9	36·3	42·1	− 0·5	25	16	5	3·02	+2·34	18	29
	Shields	54	34	49·0	39·4	44·2	+ 0·2	36	7	3	2·38	+1·78	*	*
	Scarborough ℔	55	34	49·0	38·7	43·9	+ 0·7	27	9	3	1·54	+0·82	*	*
	York	55	33	48·9	38·0	43·5	− 0·5	27	11	4	1·05	+0·52	13	21
	Spurn Head	54	36	49·0	40·3	44·7	+ 0·2	26	5	4	0·55	?	*	*
3. ENGLAND, E.	Hillington ℔	55	28	47·9	36·0	42·0	− 2·5	17	17	4	0·92	+0·29	21	33
	Yarmouth	56	33	51·9	40·0	46·0	+ 0·9	36	6	6	0·69	−0·03	*	*
	Geldeston	59	30	52·0	38·6	45·3	− 0·1	37	10	4	0·74	+0·10	27	42
	Cambridge	57	30	51·0	36·4	43·7	− 1·0	36	16	5	0·90	+0·42	22	34
	Rothamsted	55	28	49·8	35·3	42·6	− 1·2	32	19	6	0·86	+0·21	*	*
	Ingatestone	58	32	50·5	38·4	44·5	− 0·5	33	10	4	0·88	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	53	31	48·9	36·9	42·9	− 1·7	28	14	4	0·65	+0·09	15	24
	Loughborough	55	29	50·1	37·3	43·7	+ 0·2	32	13	2	0·34	−0·22	*	*
	Leicester	55	30	49·4	36·7	43·1	− 0·1	30	15	3	0·44	−0·10	13	21
	Cheadle ℔	52	31	47·1	35·7	41·4	− 1·5	14	26	5	1·02	+0·27	*	*
	Churchstoke ℔	56	28	49·7	35·0	42·4	− 0·5	32	20	5	1·12	+0·30	13	21
	Hereford ℔	58	26	50·4	36·3	43·4	− 0·7	34	16	6	0·76	+0·17	*	*
	Cirencester	54	27	48·9	34·6	41·8	− 2·2	19	31	6	1·12	+0·40	15	23
	Oxford	54	31	50·0	37·3	43·7	− 0·3	32	13	5	1·03	+0·47	17	27
5. ENGLAND, S.	London†	60	31	53·0	38·6	45·8	+ 0·8	41	10	5	0·94	+0·41	15	23
	Strathfield Turgiss ℔	57	27	50·3	35·7	43·0	− 1·7	33	18	5	1·49	+0·89	*	*
	Dungeness	58	35	54·1	41·3	47·7	+ 1·5	43	2	6	2·06	+1·26	*	*
	Hastings (St. Leonard's)	59	38	53·6	42·3	48·0	+ 1·9	42	0	6	1·75	+0·98	20	31
	Southampton	57	30	52·4	37·6	45·0	− 1·2	39	12	6	1·76	+1·07	16	25
	Hurst Castle	57	30	53·0	41·6	47·3	+ 0·3	39	1	6	1·58	+0·88	*	*
	Stowell ℔	55	34	49·8	38·1	44·0	− 1·2	30	11	5	2·43	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	53	35	46·6	38·1	42·4	− 1·5	19	11	4	2·33	+0·24	*	*
	Glasgow	53	36	47·1	39·8	43·5	+ 2·1	20	6	6	1·62	+0·74	14	23
	Ardrossan	53	35	49·3	41·7	45·5	+ 2·4	26	1	5	1·27	+0·33	*	*
	Douglas (Isle of Man)	55	40	49·7	41·9	45·8	+ 1·7	27	0	5	1·84	+0·80	20	32
7. ENGLAND, N.W.	Newton Reigny (Penrith)	53	32	46·6	37·5	42·1	− 0·4	20	13	7	1·66	+0·86	18	29
	Barrow-in-Furness	54	38	49·1	42·7	45·9	− 0·2	27	0	5	1·58	+0·64	*	*
	Stonyhurst	52	33	46·8	37·5	42·2	− 1·5	20	13	7	1·51	+0·47	17	27
	Blackpool ℔	53	39	49·0	42·1	45·6	− 0·1	25	0	5	2·01	+1·15	16	25
	Manchester	53	33	47·7	37·2	42·5	− 1·7	24	13	6	1·51	+0·64	*	*
	Liverpool Obs? (Bidston)	55	39	49·6	41·4	45·5	0·0	27	2	5	2·10	+1·38	*	*
	Llandudno ℔	57	41	51·0	42·3	4·67	− 0·3	33	0	5	1·75	+0·92	14	22
	Holyhead	56	36	51·3	44·1	47·7	+ 0·2	40	0	7	2·84	+1·91	*	*
8. ENGLAND, S.W.	Llandovery	57	28	50·7	32·1	41·4	− 4·3	24	41	7	2·89	+1·69	*	*
	Pembroke	55	40	51·0	44·6	47·8	− 0·1	41	0	7	2·40	+1·47	17	27
	Arlington (N. Devon)	54	33	49·0	39·4	44·2	− 1·0	26	7	6	3·42	+2·02	*	*
	Cullompton ℔	57	31	51·2	36·1	43·7	− 2·2	37	17	6	2·06	+1·23	13	20
	Falmouth	56	39	51·2	41·8	46·5	− 1·9	32	1	7	3·47	+2·20	?21	?32
	Plymouth	57	32	52·3	41·9	46·7	− 1·1	37	3	6	2·00	+1·16	18	28
	Prawle Point	58	36	53·0	42·4	47·7	− 0·7	40	0	5	1·01	?	*	*
9. IRELAND, N.	Malin Head	52	37	48·1	40·3	44·2	− 0·5	23	5	7	1·71	?	*	*
	Londonderry	54	36	48·9	39·0	44·0	0·0	27	8	7	1·43	+0·43	*	*
	Mullaghmore	55	39	50·1	41·0	45·6	+ 1·4	29	3	6	1·32	+0·22	*	*
	Belmullet	55	39	49·1	43·0	46·1	− 1·0	29	0	7	1·87	?	*	*
	Markree Castle	55	28	49·6	33·4	41·5	− 2·1	21	35	6	1·04	+0·20	21	33
	Brookeborough	54	31	49·3	36·6	43·0	0·0	30	15	4	0·97	?	*	*
	Armagh	55	34	48·4	37·6	43·0	− 0·9	25	12	5	1·19	+0·54	24	38
	Ponsghadee	54	31	49·1	37·6	43·4	− 2·4	28	12	7	1·28	+0·53	*	*
	Edgeworthstown	55	31	48·6	33·7	42·7	− 0·8	27	15	5	0·95	+0·15	*	*
10. IRELAND, S.	Dublin	59	34	49·2	40·2	44·7	− 0·5	26	5	5	1·10	+0·50	25	40
	Parsonstown	56	34	49·1	36·9	43·0	− 1·0	28	14	6	1·27	+0·60	23	37
	Kilkenny	58	30	52·0	35·4	43·7	− 0·7	40	18	5	1·05	+0·43	*	*
	Waterford	56	29	50·9	36·0	43·5	− 3·5	36	17	5	1·30	+0·38	*	*
	Roche's Point	56	38	52·3	41·1	46·7	− 1·0	37	3	6	0·87	−0·13	*	*
	Valencia	57	38	52·3	42·9	47·6	− 1·1	39	0	7	1·98	+0·68	25	39
	Killarney	59	28	51·0	37·0	44·0	− 3·1	35	14	5	2·07	?	*	*
	Foynes	57	32	49·8	38·9	44·4	− 0·5	39	9	6	1·62	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	42	52·1	46·6	49·4	− 1·3	52	0	6	1·70	+0·83	*	*
	Jersey (Noirmont)	56	42	53·3	46·3	49·8	+ 0·5	55	0	7	2·41	+1·42	16	24

Stations marked ℔ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 46.] *New Series.* WEEK ENDING MONDAY, 15TH NOVEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

DISTRICTS. (See p. 184.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
			Averages of				For the Week.		Since December 29, 1885.			
	Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	51	31	47·7	38·4	43·1	1 above.	23	10	1689	−163	689	+ 97
1. SCOTLAND, EAST	53	34	47·7	37·9	42·8	2 above.	23	11	2280	− 75	765	+129
2. ENGLAND, N.E.	51	33	47·7	39·0	43·4	1 above.	22	8	2487	− 46	715	+171
3. ENGLAND, EAST	54	31	48·7	40·1	44·4	2 above.	25	5	2979	+ 70	768	+195
4. MIDLAND COUNTIES	54	32	47·6	39·9	43·8	2 above.	21	6	2902	+ 33	743	+157
5. ENGLAND, SOUTH	55	32	49·9	40·5	45·2	1 above.	29	4	3249	+ 85	602	+181
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	52	32	48·1	39·8	43·9	2 above.	23	6	2268	−219	639	+129
7. ENGLAND, N.W.	55	35	48·1	41·5	44·8	1 above.	22	1	2587	− 68	617	+190
8. ENGLAND, S.W.	55	31	50·1	40·9	45·5	1 above.	29	3	2971	− 92	500	+248
9. IRELAND, NORTH	54	25	49·5	40·2	44·9	2 above.	28	5	2436	−147	510	+110
10. IRELAND, SOUTH	55	27	50·0	41·3	45·7	1 above.	29	2	2823	−122	413	+138
— CHANNEL ISLANDS	57	42	52·5	45·7	49·1	1 above.	30	0	3376	+ 4	202	+108

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 184.)	Rainfall. For the Week.			Rainfall. Since December 29, 1885.				Bright Sunshine. For the Week.		Bright Sunshine. Since December 29, 1885.			
	Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	10	1 more.	223	+22	30·2	− 1·1	9	16	1261	+ 82	30	+ 2
1. SCOTLAND, EAST	7	6	1 more.	176	+ 6	21·5	− 2·0	4	7	1289	− 52	31	− 1
2. ENGLAND, N.E.	5	5	2 less.	173	+ 9	25·4	+ 0·9	14	23	1076	−143	26	− 4
3. ENGLAND, EAST	7	15	9 more.	165	− 4	22·0	− 2·2	12	20	1433	− 53	35	− 2
4. MIDLAND COUNTIES	6	9	3 more.	174	+10	28·2	+ 2·0	5	8	1177	−153	29	− 4
5. ENGLAND, SOUTH	6	15	9 more.	165	+ 8	26·1	+ 1·3	5	8	1416	− 11	35	0
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	5	13	1 more.	186	+ 4	39·3	+ 3·9	8	14	1144	−140	28	− 3
7. ENGLAND, N.W.	6	7	1 less.	179	+ 9	36·9	+ 5·5	9	15	1174	−109	29	− 2
8. ENGLAND, S.W.	6	9	2 less.	184	+ 4	38·3 *	− 0·1	12	19	1360	−175	33	− 5
9. IRELAND, NORTH	6	17	8 more.	197	− 5	35·7	+ 2·5	13	21	1032	−175	25	− 4
10. IRELAND, SOUTH	6	11	3 more.	194	+ 6	39·2	+ 4·1	15	25	1194	−186	29	− 5
— CHANNEL ISLANDS	7	8	2 less.	212	+17	31·2	+ 1·9	9	14	1706	−115	42	− 3

General Remarks.

Weather has continued in a very dull, unsettled, and rainy condition over the whole Kingdom.

Temperature has been above the mean in all districts, the excess being 1° or 2°. The highest of the maxima, which were generally recorded on the 15th, varied from 51° in "Scotland, N." and "England, N.E.", to 55° over the southern and western parts of England and in the south of Ireland, and to 57° in the "Channel Islands". The lowest of the minima, which were registered in most places on the 9th, ranged from 25° to 27° in Ireland, from 31° to 34° in Scotland, and from 31° to 35° over England; in the "Channel Islands" the minimum was no lower than 42°.

Rainfall has been rather less than the normal amount in "England, N.E." "England, N.W.", "England, S.W.", and the "Channel Islands", but more in all other districts; in "England, E." and "England, S." the excess has been very considerable.

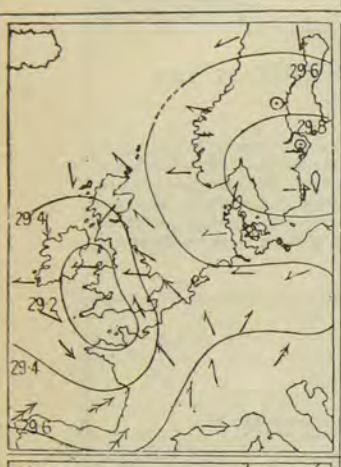
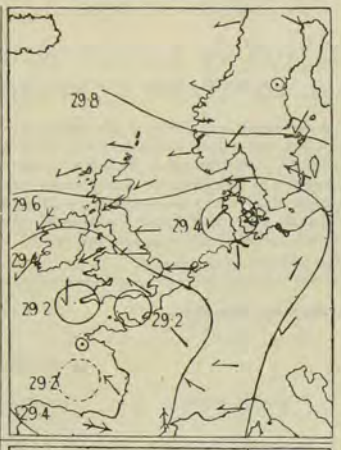
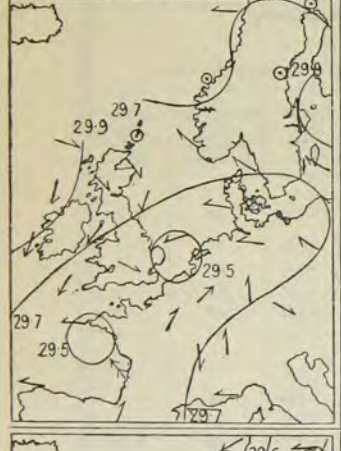
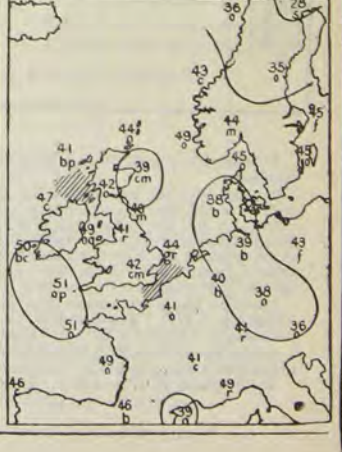
Bright sunshine shows a very general decrease, the percentages of the possible amount of duration varying from 7 in "Scotland, E." and 8 over central and southern England, to in "England, N.E." and 25 in "Ireland, S."

Depressions observed.—The distribution of barometric pressure has been rather irregular and the movements of the depressions very erratic. During the greater part of the period the barometer was comparatively high both over Spain and Scandinavia, while in the intervening regions (*i.e.*, over the North Sea, the United Kingdom, and the Bay of Biscay) numerous small depressions have appeared. Some of these disturbances have travelled in a south-south-easterly direction over the more western parts of our Islands, while others have moved in a north-north-westerly direction over the North Sea. At the close of the week the conditions were somewhat less complex, a depression which had travelled south-south-eastwards to the neighbourhood of Bristol and afterwards east-north-eastwards, was disappearing over the Baltic, while a rather deep disturbance had approached the north-west of Scotland from the Atlantic. The winds have been very variable in direction, and with few exceptions, light or moderate in force, but towards the end of the period a South-Westerly current had become general over our Islands.

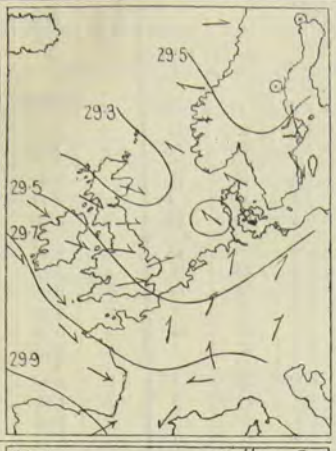
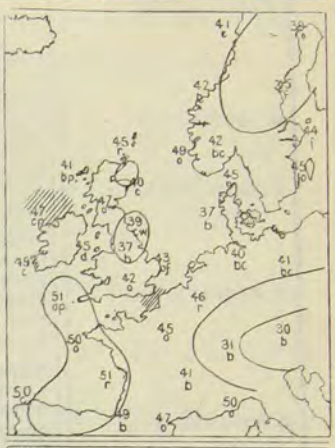
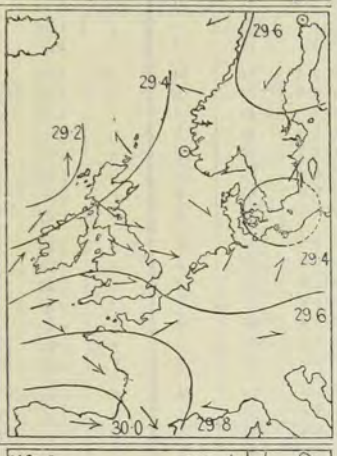
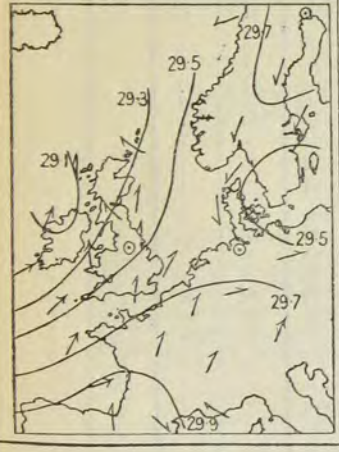
* This value has been altered slightly owing to some errors in recent Returns from Arlington.

A 24269. 350.—11/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, November 9.** *Weather* fine in the east of England and the west and south of Ireland ; cloudy elsewhere, with showers in the west and south, and a thunderstorm at Rochefort. Rain falling very generally during day, and a thunderstorm occurring at Aberdeen. *Temperature* fallen several degrees in Ireland and at some of the French stations, but risen in most other places ; readings over our Islands ranging from 48° at Hurst Castle to 30° at Parsonstown. *Wind* South-Easterly over the Netherlands as well as on our east coasts ; Northerly or North-Westerly in Ireland and the south-west of England. Strong to a gale from South-West in the south-west of France. *Sea* moderate to smooth. *Barometer* rising at all our northern and the Scandinavian stations ; falling briskly over our Islands and France. An elongated depression lying over Wales and the south-west of England, and a shallow disturbance over North Germany. Depressions over England developing several minima, and moving slowly to the south-eastward during day ; that over Germany travelling in a north-westerly direction.	
		Wednesday, November 10. *Weather* rainy in the south-east of England and east of Scotland, showery in extreme north-west, fair elsewhere. Heavy rain over France and the south of England during day. *Temperature* fallen generally ; readings over our Islands ranging from 48° at Spurn Head and Yarmouth to 39° at Prawle Point. *Wind* light or moderate from South in the south-west of France ; South-Easterly over the south-east of England, Germany, Denmark, and the Netherlands. North-Easterly or Northerly elsewhere ; blowing strongly in the north of Scotland. *Sea* rough at Valencia, Scilly, and Yarmouth ; moderate to smooth elsewhere. *Barometer* falling over France and the southern part of Scandinavia ; rising decidedly over our Islands. Depression noticed over England yesterday now found over north of France, and shallow disturbance which then lay over Germany travelling in a north-westerly direction over the North Sea.	
		**Thursday, November 11.** *Weather* rainy in the south-east of England, showery at Shields and Mullaghmore, cloudy elsewhere, with snow at Hernösand. Heavy rain falling during day in most places, especially in the south of France. *Temperature* changed little and irregularly ; readings over our Islands ranging from 49° at Spurn Head and Scilly to 39° at Stornoway and Wick. *Wind* North-Westerly in Scotland, North-Easterly over England and Ireland, with moderate gales at Donaghadee and Yarmouth, light Southerly in France, and moderate from South-East on eastern shores of the North Sea. Wind backing to the Southward during the day in the north-west of Scotland. *Sea* rough at Yarmouth, rather so at Spurn Head, Donaghadee, Valencia, and Scilly, moderate to smooth elsewhere. *Barometer* rising generally, but new depression lying off the East of England. The small depression noticed yesterday over the north of France moving away over Bay of Biscay, larger disturbance over the North Sea dispersed. Barometer falling quickly during day in north-west of Scotland, and fresh depression approaching our north-west coast.	
		Friday, November 12. *Weather* fair in the south of Ireland, Denmark, and the Netherlands, but dull elsewhere, with rain in many places. Rain falling generally during the day. *Temperature* risen a little in the west and over Sweden, but fallen a little in most other places ; readings over our Islands ranging from 38° at Leith to 51° at Scilly. *Wind* light South-Westerly and Southerly in south-east of England, Northerly or North-Westerly in the west and north. Fresh to strong in exposed places. *Sea* rather rough at Malin Head ; moderate to smooth elsewhere. *Barometer* fallen briskly in our Islands and Scandinavia, risen over France. Depression which lay off the east of England yesterday now moving slowly to the northward, but new disturbance lying over the Irish Sea. Former system subsequently continuing to travel northwards, but latter moving slowly south-eastwards.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. PRESSURE AND WIND. **8 a.m.**	**6 p.m.**	**Weather** During the 24 hours succeeding 8 a.m. on the dates given.	**Synoptic Charts.** TEMPERATURE AND WEATHER **at 8 a.m.**
		**Saturday, November 13.** *Weather* fine over North Germany and the east of Great Britain, but cloudy or overcast elsewhere, with showers at several of our western and northern stations. Showers falling generally later. *Temperature* changed little and irregularly; readings over our Islands ranging from 51° at Scilly to 37° at York. *Wind* moderate Westerly or North-Westerly over our Islands and the west and north of France, but South-Easterly on the eastern shores of the North Sea and Easterly in the south of France. *Sea* rather rough at Mullaghmore, but moderate to smooth elsewhere. *Barometer* falling at all but our south-western and southern stations. Areas of relatively high pressure lying over Spain and South Germany, but depression noticed over our west coasts on previous day now found off the north coast of Holland. Slight rise taking place over our Islands later.	
		**Sunday, November 14.** *Weather* fine over Great Britain and the north of Scandinavia, but cloudy or overcast elsewhere, with rain on our extreme north-west coasts as well as in some parts of France. Heavy rain falling later at some of our western stations. *Temperature* fallen over northern but risen over southern Europe; readings over our Islands ranging from 52° at Scilly and Jersey to 31° at Wick. *Wind* moderate Westerly or North-Westerly over the greater part of our Islands and France, but South-Westerly in Germany and Easterly or North-Easterly over Scandinavia and the north of Denmark. Subsequently backing to South-West or South on our extreme western coasts and increasing in force. *Sea* slight or smooth in most places. *Barometer* rising in our Islands and France, but falling over Scandinavia, Denmark, and Germany. Pressure highest in Portugal, with depression of the previous two days over central Denmark. Brisk fall taking place later on our western and northern coasts and depression appearing off the west of Scotland.	
		**Monday, November 15.** *Weather* fine in the south of France, and foggy in the south of Denmark, but cloudy elsewhere, with rain at several of our western and northern stations. Rain extending to the east and south later. *Temperature* risen generally, quickly in the north; readings over our Islands varying from 54° at Scilly to 46° at York. *Wind* strong South-Westerly on our south and south-west coasts; moderate Southerly or South-Easterly in the north, light North-Easterly or Northerly over Denmark and the south of Sweden. Subsequently veering to North-West in Ireland. *Sea* rough in the south-west and also at Stornoway, but moderate to smooth elsewhere. *Barometer* falling in our Islands, but rising at most of the continental stations. Pressure still highest in Portugal, with a large depression off our extreme north-west coasts. Depression subsequently moving north-eastwards, but subsidiary disturbances appearing over Ireland and England.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟫⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 181 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	50	38	47·7	41·7	44·7	+ 2·6	20	1	7	0·98	−0·01	*	*
	Stornoway	51	31	48·0	36·3	42·2	+ 0·5	25	16	7	1·11	+0·03	9	16
	Wick	50	31	47·4	37·1	42·3	+ 0·8	23	14	7	0·81	+0·13	*	*
1. SCOTLAND, E.	Nairn	53	34	47·7	36·1	41·9	+ 1·1	16	25	7	0·67	+0·14	*	*
	Aberdeen	50	38	47·1	39·1	43·1	+ 2·2	20	8	7	0·73	−0·02	4	7
	Leith	53	36	48·4	38·4	43·4	+ 2·4	25	10	6	0·50	+0·02	*	*
2. ENGLAND, N.E.	Alnwick Castle	49	33	46·3	38·3	42·3	+ 1·0	18	10	6	0·53	−0·22	*	*
	Durham	50	34	47·2	38·2	42·7	+ 1·6	21	11	4	0·47	−0·22	10	17
	Shields	51	34	48·0	38·6	43·3	+ 0·8	23	10	4	0·29	−0·33	*	*
	Scarborough ¶	51	34	47·7	40·3	44·0	+ 1·9	21	5	3	0·39	−0·33	*	*
	York	51	33	48·6	36·9	42·8	+ 0·8	27	14	6	0·35	−0·17	17	28
	Spurn Head	51	36	48·6	41·6	45·1	+ 2·4	23	1	6	1·04	?	*	*
3. ENGLAND, E.	Hillington ¶	52	38	48·4	40·6	44·5	+ 1·8	23	4	7	1·65	+1·01	14	23
	Yarmouth	54	33	49·7	40·9	45·3	+ 2·1	28	3	7	1·42	+0·68	*	*
	Geldeston	54	35	49·6	40·2	44·9	+ 1·4	28	5	7	1·80	+1·15	17	27
	Cambridge	54	31	49·0	38·3	43·7	+ 1·4	27	10	5	1·52	+1·05	6	10
	Rothamsted	52	36	47·8	40·8	44·3	+ 2·7	21	3	7	1·38	+0·74	*	*
	Ingatestone	53	37	47·9	39·5	43·7	+ 1·1	22	7	7	1·41	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	51	35	48·0	38·3	43·2	+ 0·4	24	10	5	0·43	−0·08	9	15
	Loughborough	54	33	48·0	39·7	43·9	+ 2·3	23	6	7	0·75	+0·20	*	*
	Leicester	54	38	47·6	41·4	44·5	+ 3·1	20	2	7	1·22	+0·68	4	7
	Cheadle ¶	51	38	45·8	40·2	43·0	+ 1·8	15	5	6	0·79	+0·04	*	*
	Churchstoke ¶	53	37	46·9	40·4	43·7	+ 2·7	19	4	6	0·70	−0·12	4	7
	Hereford ¶	54	35	48·5	40·2	44·4	+ 2·0	24	5	5	1·15	+0·60	*	*
	Cirencester	53	35	47·9	39·0	43·5	+ 1·8	23	8	6	1·05	+0·33	5	8
	Oxford	54	32	47·9	39·9	43·9	+ 1·9	22	6	6	1·07	+0·52	2	3
5. ENGLAND, S.	London†	55	33	49·3	40·3	44·8	+ 1·8	27	5	5	1·24	+0·74	3	5
	Strathfield Turgiss ¶	55	32	49·5	38·9	44·2	+ 1·6	28	9	5	1·31	+0·73	*	*
	Dungeness	55	35	51·6	41·4	46·5	+ 2·8	34	2	6	1·55	+0·73	*	*
	Hastings (St. Leonard's)	55	39	50·6	42·2	46·4	+ 1·7	31	0	7	2·65	+1·90	5	8
	Southampton	55	36	50·2	40·6	45·4	+ 1·4	30	4	7	1·18	+0·50	6	10
	Hurst Castle	54	35	50·1	40·9	45·5	+ 0·1	29	3	7	1·92	+1·23	*	*
	Stowell ¶	54	34	47·7	39·5	43·6	+ 0·4	22	7	7	0·95	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	51	33	46·7	36·7	41·7	− 0·8	13	22	6	1·90	−0·30	*	*
	Glasgow	52	32	47·6	39·5	43·6	+ 3·3	22	7	5	0·97	+0·09	5	9
	Ardrossan	52	38	49·1	40·3	44·7	+ 3·2	26	5	4	1·15	+0·23	*	*
	Douglas (Isle of Man)	52	40	48·8	42·6	45·7	+ 2·9	26	0	6	1·01	−0·06	11	18
7. ENGLAND, N.W.	Newton Reigny (Penrith)	50	36	45·4	38·1	41·8	+ 0·7	10	16	6	0·64	−0·16	4	7
	Barrow-in-Furness	51	40	48·6	42·0	45·3	+ 1·6	23	0	5	0·86	−0·04	*	*
	Stonyhurst	52	35	46·7	39·5	43·1	+ 1·1	18	7	5	0·65	−0·45	12	20
	Blackpool ¶	52	37	49·1	40·8	45·0	+ 0·7	26	3	5	0·59	−0·21	16	27
	Manchester	53	37	47·3	40·8	44·1	+ 1·4	20	3	5	0·59	−0·28	*	*
	Liverpool Obsy (Bidston)	54	39	48·7	41·9	45·3	+ 1·3	24	0	6	0·64	−0·04	*	*
	Llandudno ¶	55	42	49·1	44·5	46·8	+ 1·3	34	0	6	1·03	+0·21	4	7
	Holyhead	53	41	50·1	44·4	47·3	+ 1·1	37	0	6	0·90	+0·01	*	*
8. ENGLAND, S.W.	Llandovery	55	33	49·7	38·3	44·0	+ 0·4	30	10	6	1·16	0·00	*	*
	Pembroke	53	41	49·7	44·3	47·0	+ 1·3	35	0	6	0·81	−0·11	11	18
	Arlington (N. Devon)	52	34	47·9	39·9	43·9	+ 0·7	22	6	7	1·46‖	+0·03	*	*
	Cullompton ¶	55	31	49·9	39·7	44·8	+ 0·6	29	6	7	0·69	−0·10	3	5
	Falmouth	54	36	51·1	42·4	46·8	+ 1·2	34	0	6	0·58	−0·70	20	32
	Plymouth	55	32	51·7	49·6	46·2	+ 0·1	35	4	6	0·32	−0·50	13	21
	Prawle Point	54	36	51·0	40·9	46·0	− 0·2	33	3	6	0·92	?	*	*
9. IRELAND, N.	Malin Head	52	38	49·1	43·1	46·1	+ 2·6	29	0	6	1·75	?	*	*
	Londonderry	54	33	50·1	39·5	44·8	+ 2·0	30	7	7	1·68	+0·67	*	*
	Mullaghmore	53	34	50·3	42·7	46·5	+ 3·1	32	0	6	1·77	+0·65	*	*
	Belmullet	52	34	49·9	43·4	46·7	+ 0·7	33	0	6	2·99	?	*	*
	Markree Castle	51	25	49·2	38·8	44·0	+ 1·4	27	9	6	1·74	+0·92	11	18
	Brookeborough	52	29	49·0	37·7	43·4	+ 1·6	28	12	5	1·41	?	*	*
10. IRELAND, S.	Armagh	53	33	49·4	38·4	43·9	+ 1·3	28	10	4	1·04	+0·40	14	23
	Donaghadee	53	37	50·0	40·1	45·1	+ 1·3	30	5	6	1·07	+0·33	*	*
	Edgeworthstown	52	29	48·7	38·3	43·5	+ 1·3	26	10	7	1·66	+0·82	*	*
	Dublin	55	35	49·4	41·6	45·5	+ 1·5	26	1	6	0·64	+0·10	14	23
	Parsonstown	52	29	48·7	38·0	43·4	+ 0·7	27	11	6	0·93	+0·27	15	25
	Kilkenny	55	32	49·9	40·3	45·1	+ 2·1	29	5	6	0·92	+0·32	*	*
	Waterford	52	31	49·5	40·3	44·9	− 0·6	27	5	4	0·94	+0·04	*	*
	Roche's Point	55	36	51·6	42·1	46·9	+ 0·6	34	0	5	0·84	−0·21	*	*
	Valencia	54	37	51·4	44·9	48·2	+ 0·5	43	0	7	1·71	+0·44	17	27
	Killarney	54	27	49·8	40·1	45·0	− 1·0	29	5	6	1·67	?	*	*
	Foynes	53	38	49·9	42·7	46·3	+ 2·8	30	0	6	1·27	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	42	52·6	45·7	49·2	− 0·1	50	0	7	0·68	−0·19	*	*
	Jersey (Noirmont)	57	43	52·4	45·6	49·0	+ 2·0	49	0	6	0·86	−0·12	9	14

Stations marked ¶ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

‖ The corresponding values for the weeks ending October 11th and 18th should be respectively "1·83" and "4·21."

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 47.] *New Series.* WEEK ENDING MONDAY, 22ND NOVEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

DISTRICTS. (See p. 188.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	56	33	48·4	36·6	42·6	2 above.	27	15	1716	−143	704	+ 86
1. SCOTLAND, EAST	58	29	48·7	35·5	42·1	2 above.	28	18	2308	− 54	783	+116
2. ENGLAND, N.E.	56	28	48·1	37·0	42·6	2 above.	25	14	2512	− 30	729	+159
3. ENGLAND, EAST	55	26	49·7	36·6	43·2	2 above.	31	15	3011 *	+ 90	783	+186
4. MIDLAND COUNTIES	57	27	49·0	37·6	43·3	3 above.	28	12	2930	+ 49	755	+139
5. ENGLAND, SOUTH	56	29	51·9	39·1	45·5	3 above.	37	8	3286	+106	610	+170
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	57	34	50·3	40·0	45·2	4 above.	31	6	2299	−209	595	+111
7. ENGLAND, N.W.†	56	30	49·1	40·1	44·6	2 above.	26	5	2613	− 54	622	+174
8. ENGLAND, S.W.	56	34	52·2	43·6	47·9	4 above.	41	0	3012	− 75	500	+236
9. IRELAND, NORTH	57	29	50·7	40·2	45·4	3 above.	31	5	2467	−129	515	+ 93
10. IRELAND, SOUTH	57	31	53·0	44·4	48·7	5 above.	47	0	2870	− 95	413	+122
— CHANNEL ISLANDS	56	44	54·2	47·6	51·0	4 above.	63	0	3439	+ 31	202	+108

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 188.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	5	11	2 more.	228	+22	31·3	− 1·0	10	19	1271	+ 85	30	+ 2
1. SCOTLAND, EAST	4	4	2 less.	180	+ 6	21·9	− 2·2	22	42	1311	− 41	31	− 1
2. ENGLAND, N.E.	3	1	6 less.	176	+ 6	25·5	+ 0·3	21	37	1097	−137	27	− 3
3. ENGLAND, EAST	3	2	4 less.	168	− 6	22·2	− 2·7	11	20	1444	− 58	35	− 2
4. MIDLAND COUNTIES	3	2	4 less.	177	+ 8	28·4	+ 1·5	13	23	1190	−155	29	− 4
5. ENGLAND, SOUTH	4	5	1 less.	169	+ 8	26·6	+ 1·1	16	27	1432	− 9	35	0
Principal Grazing, &c. Districts. 6. SCOTLAND, WEST	5	10	5 less.	191	+ 5	40·4 *	+ 4·0	20	35	1164	−132	28	− 3
7. ENGLAND, N.W.†	5	4	4 less.	184	+10	37·3	+ 5·0	19	35	1193	−102	29	− 2
8. ENGLAND, S.W.	5	7	3 less.	189	+ 4	39·0	− 0·5	9	16	1369	−182	33	− 5
9. IRELAND, NORTH	5	5	4 less.	202	− 5	36·2	+ 2·1	12	20	1044	−178	25	− 4
10. IRELAND, SOUTH	4	3	4 less.	198	+ 6	39·5	+ 3·6	12	20	1206	−191	29	− 5
— CHANNEL ISLANDS	4	2	8 less.	216	+16	31·4	+ 1·2	25	40	1731	−104	42	− 3

General Remarks.

Weather continued in an unsettled and rainy condition during the earlier part of the week, but the falls of rain were less heavy and frequent than they had been of late and the sky less densely overcast. Towards the end of the period the conditions became fair and dry, but much mist or fog prevailed, especially over southern and central England.

Temperature remained above the mean until the week drew towards its close, when it fell very decidedly. In most of the "Grazing" districts the averages for the week varied from 3° to 5° above the mean, while in the "Wheat-producing" districts the excess was only 2° or 3°. The highest of the maxima were registered on irregular dates, and ranged from 55° in "England, E." and "England, S." to 58° in "Scotland, E." The lowest of the minima were recorded either on the 19th or 22nd, and varied between 26° in "England, E.", 34° in "Scotland, W." and "England, S.W.", and 44° in the "Channel Islands".

Rainfall was rather more than the mean in "Scotland, N.", but in all other districts it was less than its normal value.

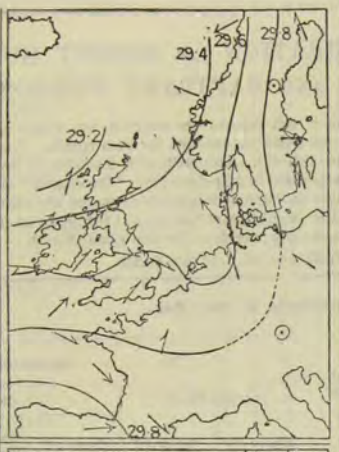
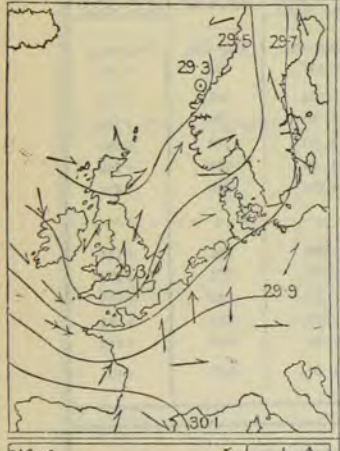
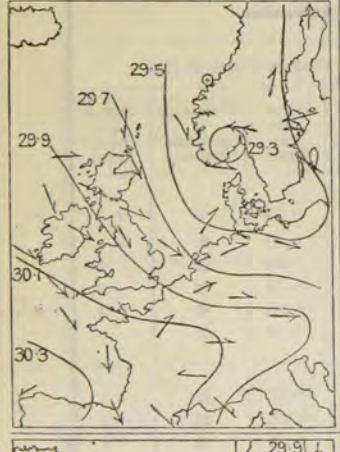
Bright sunshine shows an increase in most places, the percentages of the possible amount of duration ranging from 16 in "England, S.W.", 19 in "Scotland, N.", and 20 over Ireland, to 40 in the "Channel Islands" and 42 in "Scotland, E."

Depressions observed.—During the greater part of this period barometric pressure was highest to the southward of our Islands, while a series of depressions skirted our extreme western and north-western coasts in a northerly or north-easterly direction. Some of these disturbances were accompanied by subsidiary depressions which passed more directly over us, and caused the wind (which was generally moderate to strong from the Southward or South-Westward) to vary somewhat in direction. Towards the end of the week the barometer rose steadily over the United Kingdom, and a large anticyclone was developed over the north of France, the greater part of England, and the North Sea. With this change in the distribution of pressure the Southerly winds on our western coasts became light, while over England variable or light Easterly and North-Easterly airs appeared.

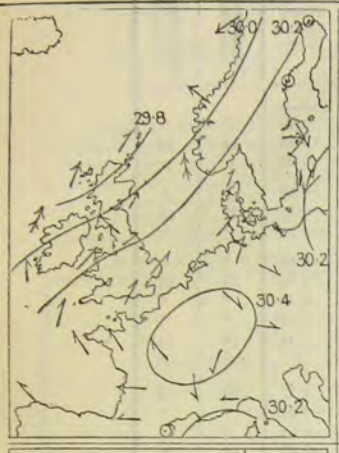
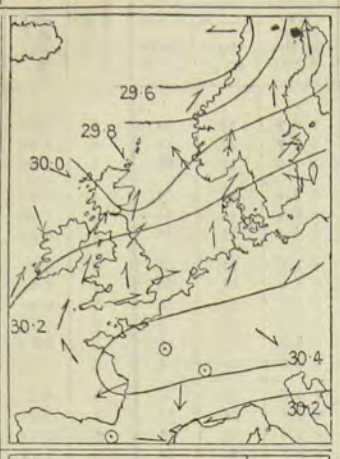
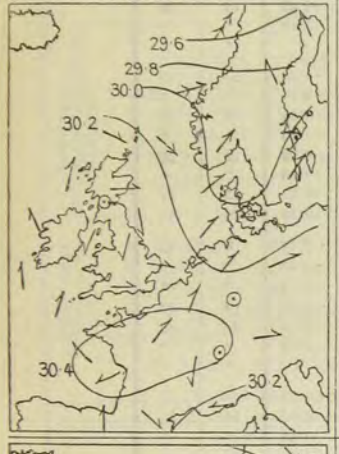
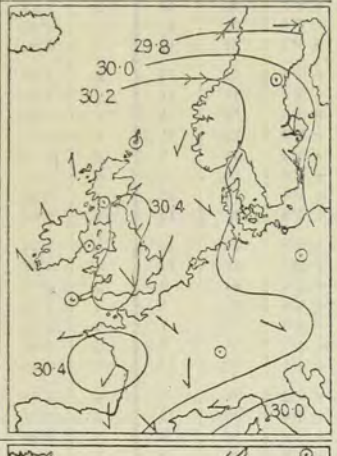
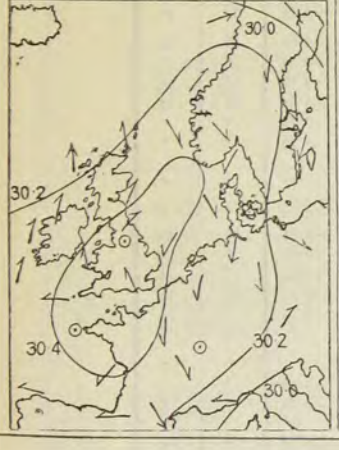
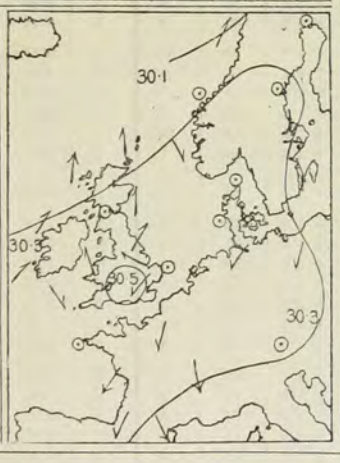
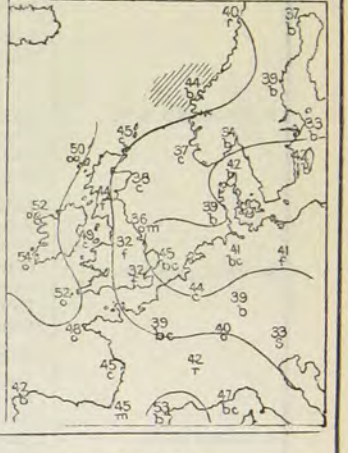
* This value has been altered slightly owing to a correction in a recent Return from Laudale.
† The values in this district are liable to alteration owing to the non-arrival of the Return from Llandudno.

A 24398. 350.—11/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, November 16.** *Weather* fair over the greater part of our Islands, but rainy in Denmark, the south of Norway, and the south-west of France. Rain falling later in most parts of the Kingdom, commencing first in Ireland. *Temperature* risen in Scandinavia, Denmark, and the Netherlands, but risen elsewhere; readings over our Islands ranging from 53° at Dungeness to 35° at Donaghadee and Parsonstown. *Wind* moderate South-Westerly on our extreme western coasts, but Westerly in other parts of our Islands. Westerly gales over the Bay of Biscay; strong South-Easterly winds on the eastern shores of the North Sea. Subsequently backing to South-West over our Islands generally. *Sea* rather rough at Scilly, but moderate to smooth elsewhere. *Barometer* rising at all but our south-eastern and the French stations. Pressure highest in Spain, but relatively high over the Gulf of Bothnia, with a depression off the north of Scotland. New disturbance subsequently appearing off the Hebrides, and barometer falling slightly on our western coasts.	
		**Wednesday, November 17.** *Weather* fair at many of our western and northern stations, but cloudy elsewhere, with rain over England and the north of France. Improvement taking place over England later. *Temperature* fallen over the eastern parts of Great Britain and France, but fallen elsewhere; readings ranging from 53° at Pembroke, Scilly, Jersey, and Hurst Castle to 35° at Wick. *Wind* moderate from West or North-West in Ireland and Scotland, strong from West or South-West over the Channel and Bay of Biscay, and light from South-West or South over Germany, the east of England, and the eastern shores of the North Sea. Subsequently veering to the North-Westward over England. *Sea* rough in the Channel and Bay of Biscay, but moderate to smooth elsewhere. *Barometer* rising in Ireland, France, and Germany, but falling elsewhere. Pressure highest in Spain and lowest to the northward of our Islands, but well-defined and rather deep depression lying over Wales. Depression subsequently moving eastwards, and barometer rising in all parts of our Islands.	
		**Thursday, November 18.** *Weather* fair generally, but rainy at the German stations and also at Rochefort. Rain falling later in Ireland and the west of Scotland. *Temperature* risen a little on our western and northern coasts and also in the south of France, but fallen elsewhere; readings over our Islands ranging from 52° at Scilly and Jersey to 36° at Wick. Sharp frost occurring over Great Britain at night. *Wind* moderate or fresh from West or North-West over our Islands and the greater part of France, but light from South-West in Denmark and from South-East in Sweden. Subsequently backing to South in Ireland and the west of Scotland. *Sea* rather rough at Scilly, but moderate to smooth elsewhere. *Barometer* rising at all but the Swedish and Danish stations. Pressure high in the north of Spain, with depression of previous day lying in the neighbourhood of the Skager Rack. Slight fall taking place on our west coast later.	
		Friday, November 19. *Weather* rainy at several of our western and northern stations, and foggy over England, but fair or fine elsewhere. Slight rain falling later in most parts of the Kingdom. *Temperature* risen several degrees on our western and extreme northern coasts; readings over our Islands ranging from 54° at Mullaghmore, Valencia, and Scilly to 31° in London. Rapid rise taking place over England later. *Wind* North-Westerly or Northerly in Sweden, Denmark, and Germany, and Easterly or South-Easterly in the west of France, but Southerly or South-Westerly in our Islands; strong in force in the west of Ireland. *Sea* rather rough at Stornoway and Valencia, but moderate to smooth elsewhere. *Barometer* rising at all but our western and northern stations. Anticyclone lying over France, and band of relatively high pressure over the North Sea and Scandinavia, but shallow depression skirting the north-west of Scotland. Barometer rising in west later.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, November 20.** *Weather* dull and mild generally, with rain at some of the north-western stations. Showers of rain later except in the east and south; fog in the south-east. *Temperature* high for time of year, being above 50° at 8 a.m. over all but our south-eastern counties. Readings low in France and Germany. *Wind* South-Westerly. Fresh to a gale at the western stations, light in the East and South-East. Becoming more Westerly in Scotland at night, and decreasing in force generally. *Sea* rough in west, slight or smooth elsewhere; afterwards going down in the west also. *Barometer* highest in France, lowest off our north-west coasts. Depressions in north-west and west moving north-eastwards, and pressure increasing generally.	
		**Sunday, November 21.** *Weather* fair, but cloudy at first, except at the Norwegian and some of our south-western stations, where rain fell. Slight local showers during the day. *Temperature* falling decidedly in the north, and afterwards in the east and south-east of England also. Maxima all lower than of late, and minima at night low over Great Britain. *Wind* light and variable; becoming Northerly at all the eastern stations, but remaining Southerly in the west, without much increase in force. *Sea* smooth except at the mouth of the English Channel. *Barometer* rising generally. Anticyclone over France and a well formed "ridge" over England. The ridge afterwards becoming an independent anticyclone over England and the North Sea.	
		**Monday, November 22.** *Weather* very foggy over England, fair in most other places; slight rain in the north-west at times during the day. *Temperature* falling except in the west and north-west. Frost prevalent over England. Loughborough 18° colder than on 21st, and 23° colder than Valencia. *Wind* still Southerly or South-Westerly in west and north, Northerly in east and south, calm over England. No important change later. *Sea* smooth, except at Stornoway. *Barometer* high generally and rising. Anticyclone still covering England, the north of France, and North Sea. Readings at Oxford, Loughborough, and London 30·50 ins. at 6 p.m., and barometer still rising.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⇛⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 185 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	53	34	47·9	38·6	43·3	+ 2·0	23	10	5	0·90	−0·09	*	*
	Stornoway	53	33	48·7	37·0	42·9	+ 1·7	27	14	6	1·77	+0·69	10	19
	Wick	56	33	48·7	34·3	41·5	+ 1·0	19	32	5	0·61	−0·08	*	*
1. SCOTLAND, E.	Nairn	57	29	49·3	34·7	42·0	+ 2·0	20	20	4	0·62	+0·09	*	*
	Aberdeen	55	32	47·1	36·1	41·6	+ 1·8	14	24	4	0·47	−0·28	22	42
	Leith	58	30	49·7	35·6	42·7	+ 2·6	32	18	3	0·22	−0·26	*	*
2. ENGLAND, N.E.	Alnwick Castle	53	30	46·7	35·7	41·2	+ 1·1	13	25	2	0·21	−0·54	*	*
	Durham	55	28	48·5	33·6	41·1	+ 1·0	18	34	4	0·06	−0·64	22	40
	Shields	56	32	49·1	37·0	43·1	+ 1·9	29	14	2	0·07	−0·55	*	*
	Scarborough ℜ	54	35	48·3	38·8	43·6	+ 2·6	25	9	4	0·15	−0·57	*	*
	York	54	28	48·1	36·1	42·1	+ 1·3	25	17	4	0·08	−0·44	19	33
	Spurn Head	53	37	47·9	40·7	44·3	+ 3·0	22	4	2	0·09	?	*	*
3. ENGLAND, E.	Hillington ℜ	54	26	48·5	34·2	41·4	+ 0·6	18	32	4	0·17	−0·47	12	21
	Yarmouth	51	33	48·9	38·4	43·7	+ 2·2	27	10	3	0·24	−0·50	*	*
	Geldeston	53	30	49·7	37·4	43·6	+ 1·9	31	13	2	0·19	−0·44	8	14
	Cambridge	55	30	50·6	36·6	43·6	+ 2·7	34	15	2	0·14	−0·43	14	24
	Rothamsted	53	28	49·8	35·3	42·6	+ 2·4	32	19	6	0·33	−0·29	*	*
	Ingatestone	53	31	50·5	37·7	44·1	+ 3·1	33	12	2	0·26	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	54	29	47·9	36·4	42·2	+ 0·9	25	16	2	0·06	−0·45	10	17
	Loughborough	55	29	50·0	38·0	44·0	+ 3·6	31	11	3	0·08	−0·46	*	*
	Leicester	54	29	48·6	37·0	42·8	+ 2·9	27	14	4	0·19	−0·35	15	26
	Cheadle ℜ	50	34	46·6	36·8	41·7	+ 1·9	13	21	4	0 14	−0·60	*	*
	Churchstoke ℜ	57	34	50·2	40·0	45·1	+ 5·2	30	6	3	0·18	−0·62	12	21
	Hereford ℜ	54	33	51·5	38·7	45·1	+ 4·3	36	9	3	0·10	−0·45	*	*
	Cirencester	51	27	48·4	35·3	41·9	+ 1·8	18	28	3	0·36	−0·35	15	25
	Oxford	54	32	49·0	38·3	43·7	+ 2·9	27	10	4	0·38	−0·15	15	25
5. ENGLAND, S.	London†	55	30	52·0	37·4	44·7	+ 3·1	38	13	2	0·36	−0·13	9	15
	Strathfield Turgiss ℜ	54	29	50·8	36·6	43·7	+ 2·6	35	15	3	0·37	−0·20	*	*
	Dungeness	55	31	52·0	40·0	46·0	+ 2·5	36	6	4	0·78	−0·04	*	*
	Hastings (St. Leonard's)	55	35	52·2	41·6	46·9	+ 3·4	36	1	4	0·58	−0·16	19	32
	Southampton	55	31	53·4	39·6	46·5	+ 4·0	42	7	3	0·61	−0·07	20	33
	Hurst Castle	55	34	52·4	40·9	46·7	+ 2·7	38	3	5	0·49	−0·20	*	*
	Stowell ℜ	54	35	50·4	37·8	44·1	+ 2·4	32	12	4	0·53	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	56	34	49·2	39·5	44·4	+ 3·2	27	7	6	2·54	+0·33	*	*
	Glasgow	54	34	49·5	37·8	43·7	+ 3·8	30	12	4	0·55	−0·32	16	30
	Ardrossan	57	37	51·6	39·3	45·5	+ 5·1	36	8	5	0·48	−0·53	*	*
	Douglas (Isle of Man)	53	37	50·7	43·3	47·0	+ 4·9	35	0	5	0·43	−0·64	23	40
7. ENGLAND, N.W.	Newton Reigny (Penrith)	53	30	49·0	34·5	41·8	+ 1·8	20	32	4	0·27	−0·53	23	42
	Barrow-in-Furness	52	41	48·9	41·9	45·4	+ 2·4	24	0	7	1·07	+0·18	*	*
	Stonyhurst	52	36	47·8	38·9	43·4	+ 2·7	23	9	5	0·44	−0·65	17	30
	Blackpool ℜ	52	35	48·8	39·4	44·1	+ 1·1	26	7	5	0·26	−0·54	18	32
	Manchester	53	34	48·3	38·5	43·4	+ 1·9	25	10	3	0·09	−0·76	*	*
	Liverpool Obsy (Bidston)	56	39	49·9	41·6	45·8	+ 3·3	28	1	5	0·17	−0·48	*	*
	Llandudno ℜ													
	Holyhead	54	42	51·3	45·9	48·6	+ 3·2	46	0	7	0·77	−0·11	*	*
8. ENGLAND, S.W.	Llandovery	54	36	50·9	41·1	46·0	+ 4·0	32	3	7	1·13	−0·04	*	*
	Pembroke	54	45	53·1	47·9	50·5	+ 5·8	60	0	7	0·71	−0·21	11	19
	Arlington (N. Devon)	54	37	50·3	41·9	46·1	+ 4·1	29	0	6	1·15	−0·28	*	*
	Cullompton ℜ	56	34	51·9	39·4	45·7	+ 2·7	37	7	4	0·58	−0·21	7	12
	Falmouth	55	41	52·7	47·2	50·0	+ 4·6	56	0	5	0·78	−0·49	10	16
	Plymouth	55	38	53·6	44·0	48·8	+ 4·0	48	0	5	0·52	−0·50	9	15
	Prawle Point	54	38	52·7	43·6	48·2	+ 3·2	43	0	5	0·33	?	*	*
9. IRELAND, N.	Malin Head	54	37	51·0	40·6	45·8	+ 3·6	32	4	5	0·65	?	*	*
	Londonderry	57	33	50·7	39·6	45·2	+ 3·2	32	7	5	0·48	−0·59	*	*
	Mullaghmore	56	37	52·3	40·6	46·5	+ 3·7	37	4	5	0·62	−0·50	*	*
	Belmullet	54	38	51·0	42·7	46·9	+ 1·8	34	0	7	1·03	?	*	*
	Markree Castle	55	29	50·5	39·8	45·2	+ 3·2	32	6	6	0·63	−0·16	8	14
	Brookeborough	55	31	49·8	39·0	44·4	+ 3·4	29	8	2	0·32	?	*	*
	Armagh	57	33	50·5	40·6	45·6	+ 2·8	31	4	4	0·21	−0·43	15	26
	Donaghadee	54	34	49·9	39·9	44·9	+ 2·4	29	6	5	0·13	−0·59	*	*
	Edgeworthstown	56	31	50·4	38·6	44·5	+ 3·2	32	10	4	0·35	−0·49	*	*
10. IRELAND, S.	Dublin	57	37	51·7	44·4	48·1	+ 5·1	43	0	3	0·33	−0·19	13	22
	Parsonstown	57	33	52·1	41·1	46·6	+ 5·0	36	3	3	0·12	−0·53	15	26
	Killarney	57	31	52·6	41·6	47·1	+ 5·1	37	1	2	0·26	−0·34	*	*
	Waterford	54	32	52·2	42·3	47·3	+ 5·2	37	0	5	0·38	−0·52	*	*
	Roche's Point	55	39	53·1	46·0	49·6	+ 4·6	53	0	6	0·30	−0·76	*	*
	Valencia	56	41	54·3	47·9	51·1	+ 4·1	64	0	6	0·41	−0·37	7	12
	Killarney	57	33	53·7	45·3	49·5	+ 4·4	53	0	5	0·42	?	*	*
	Foynes	57	42	54·4	46·4	50·4	+ 7·3	59	0	4	0·52	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	44	54·4	48·3	51·4	+ 3·2	66	0	4	0·14	−0·73	*	*
	Jersey (Noirmont)	56	44	54·3	46·7	50·5	+ 5·0	60	0	3	0·21	−0·77	25	40

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

Errata.—The Rainfall Values given for London on page 184 in last week's Report were incorrect; they should have read "6," "1·46," "+0·96."

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 48.] *New Series.* WEEK ENDING MONDAY, 29TH NOVEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS. (See p. 192.)	Temperature of the Air.										
		Observed during the Week.					Above or below the Mean for the Week.	Accumulated.				
				Averages of				For the Week.		Since December 29, 1885.		
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Below 42°	Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	55	37	50·8	42·7	46·8	6 above.	34	0	1750	−118	704	+ 60
	1. SCOTLAND, EAST	56	33	50·2	38·8	44·5	5 above.	31	9	2339	− 34	792	+ 95
	2. ENGLAND, N.E.	55	28	48·1	38·1	43·1	3 above.	24	11	2536	− 19	740	+144
	3. ENGLAND, EAST	53	27	47·6	36·8	42·2	2 above.	23	15	3034	+ 98	798	+172
	4. MIDLAND COUNTIES	53	28	46·8	37·7	42·3	3 above.	20	12	2950	+ 53	767	+123
	5. ENGLAND, SOUTH	52	25	47·8	37·9	42·9	1 above.	24	11	3310	+110	621	+158
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	57	33	50·1	42·5	46·8	6 above.	34	0	2333	−180	595	+ 90
	7. ENGLAND, N.W.	54	32	47·6	42·1	44·8	3 above.	20	0	2634 *	− 48	621 *	+155
	8. ENGLAND, S.W.	54	29	49·7	41·2	45·4	2 above.	27	2	3039	− 76	502	+227
	9. IRELAND, NORTH	57	29	50·1	41·7	45·9	4 above.	29	1	2496	−117	516	+ 75
	10. IRELAND, SOUTH	59	29	51·5	41·1	46·3	3 above.	34	3	2904	− 86	416	+111
	— CHANNEL ISLANDS	54	41	51·2	45·3	48·3	5 above.	44	0	3483	+ 39	202	+105

	DISTRICTS. (See p. 192.)	Rainfall.							Bright Sunshine.					
		For the Week.			Since December 29, 1885.				For the Week.		Since December 29, 1885.			
		Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Hours recorded.	Percentage of possible Duration.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	8	1 less.	232	+21	32·1	− 1·1	6	12	1277	+ 82	30	+ 2
	1. SCOTLAND, EAST	2	2	4 less.	182	+ 4	22·1	− 2·6	18	36	1329	− 31	31	− 1
	2. ENGLAND, N.E.	1	less than ½	6 less.	177	+ 3	25·5	− 0·3	17	31	1114	−127	26	− 3
	3. ENGLAND, EAST	2	less than ½	6 less.	170	− 9	22·2	− 3·3	16	29	1460	− 50	35	− 1
	4. MIDLAND COUNTIES	3	1	5 less.	180	+ 7	28·5	+ 1·0	8	14	1198	−156	29	− 3
	5. ENGLAND, SOUTH	2	1	6 less.	171	+ 6	26·7	+ 0·6	9	15	1441	− 9	34	− 1
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	6	7 less.	194	+ 3	41·0	+ 3·7	8	15	1172	−130	28	− 3
	7. ENGLAND, N.W.	4	4	4 less.	188	+ 9	37·7	+ 4·6	3	6	1197 *	−105	28	− 3
	8. ENGLAND, S.W.	2	3	8 less.	191	+ 1	39·4 *	− 1·2	9	16	1378	−183	33	− 4
	9. IRELAND, NORTH	3	5	4 less.	205	− 8	36·7	+ 1·8	9	16	1053	−178	25	− 4
	10. IRELAND, SOUTH	3	3	5 less.	201	+ 3	39·8	+ 3·1	12	21	1218	−188	29	− 4
	— CHANNEL ISLANDS	3	3	7 less.	219	+13	31·7	+ 0·5	10	17	1741	−107	42	− 2

General Remarks.

Weather has been very cloudy or dull in all parts of the Kingdom, with much fog or mist. In the Metropolis the fog during the earlier days of the period was very dense and persistent.

Temperature has continued above the mean generally. The readings have, however, varied considerably in different parts of our Islands; over Scotland and in the "Channel Islands" they have been as much as 5° or 6° above the mean, and in Ireland 3° or 4° above, while over all the more southern and eastern parts of England (where the thermometer was very low at the commencement of the period) the weekly average was only 1° or 2° above the mean. The highest of the maxima, which were registered on irregular dates, ranged from 52° in "England, S." to 59° in "Ireland, S." The lowest of the minima, which were also recorded at varying times, ranged from 25° in "England, S." to 33° in the east and west of Scotland, 37° in "Scotland, N." and 41° in the "Channel Islands".

Rainfall has been less than the mean in all districts. Over the greater part of England the fall has been scarcely appreciable.

Bright sunshine has been very little prevalent, the percentages of the possible amount of duration varying between 6 and 21 in the "Grazing" districts, and between 14 and 31 in most of the "Wheat-producing" districts; in "Scotland, E.", however, as much as 36% was recorded.

Depressions observed.—The distribution of barometric pressure over our Islands and their neighbourhood continued anticyclonic until towards the end of the week, when the barometer fell quickly and depressions began to skirt our western and northern coasts. The winds were generally light and variable, while at our central stations calms were very prevalent; as the anticyclone gave way, however, the wind became South-Westerly, and on our northern and western coasts it blew strongly, in some exposed places reaching the force of a gale.

* These values have been altered slightly owing to the receipt of further information.

A 24486. 350.—12/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

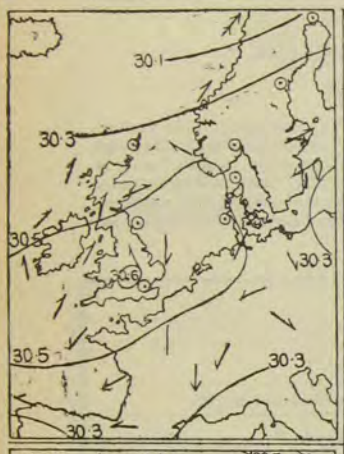
Weather

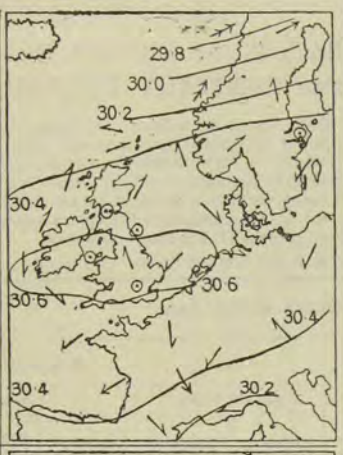
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, November 23.

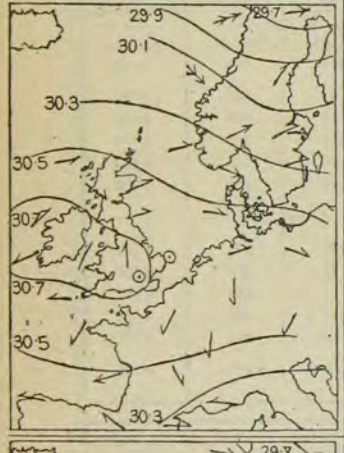
Weather dull in Norway, Germany, and the east of France, and foggy over England, but fair or fine elsewhere. Rain falling later in the west of Norway.

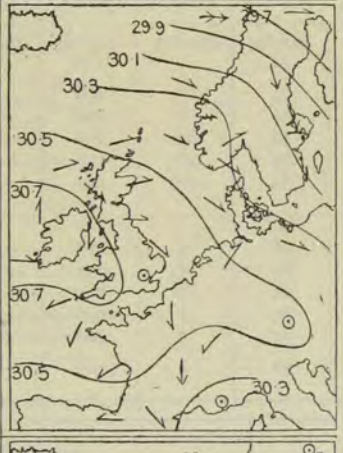
Temperature risen a few degrees in Norway and the north of England, but fallen elsewhere; readings over our Islands ranging from 52° at Valencia and 51° at Scilly to 29° at Oxford, Cambridge, and in London. Thermometer in the south of London not rising above 32° all day.

Wind Southerly or South-Westerly on the western and northern coasts of our Islands and Norway, but calm over central England, and moderate North-Easterly at our extreme southern and the French stations. South-Westerly gale at Bodö and Christiansund.

Sea rather rough at Stornoway, but moderate to smooth elsewhere.

Barometer rising at all but the Norwegian stations. Large anticyclone, with readings above 30·5 inches, lying over England, the north of France, and the North Sea, with an area of relatively low pressure near Bodö. Brisk fall taking place over Scandinavia later.





Wednesday, November 24.

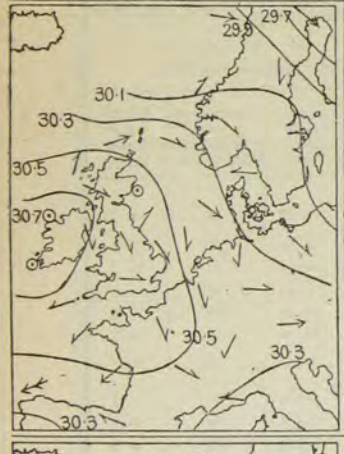
Weather cloudy in Scandinavia and foggy over the greater part of England and Ireland, but fine elsewhere. Aurora seen in the east of Scotland at night.

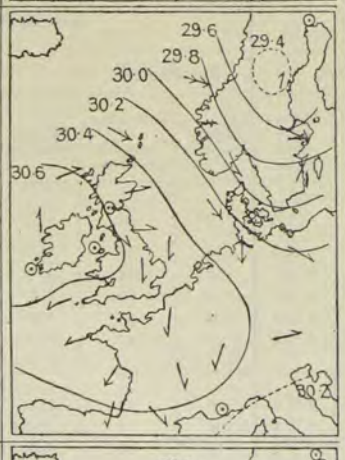
Temperature risen over Sweden, Denmark, and the north of our Islands, but fallen elsewhere; readings over the United Kingdom ranging from 51° at Mullaghmore and Belmullet to 28° at Oxford, Cambridge, and in London. Sharp frost occurring over England at night.

Wind South-Westerly or Westerly over Scandinavia and our northern coasts, with gales at Bodö and Christiansund; light or moderate from the North-Eastward over Germany, France, and the extreme south of our Islands. Subsequently veering to North-West in Scandinavia.

Sea moderate to smooth.

Barometer rising at all but the Swedish stations. Anticyclone, with readings above 30·7 inches, lying over Ireland and England, and large depression over the north of Scandinavia. Depression subsequently moving eastwards, but barometer falling somewhat over Denmark and the Baltic.





Thursday, November 25.

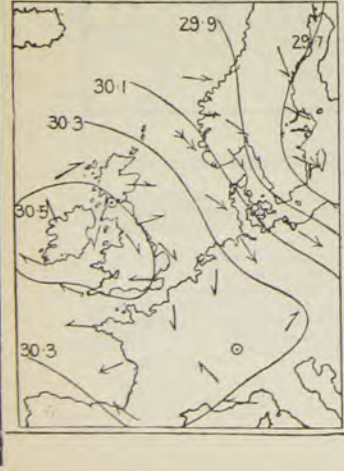
Weather rainy in Germany and the west of Norway, and foggy at several of the English and Irish stations, but fair or fine elsewhere.

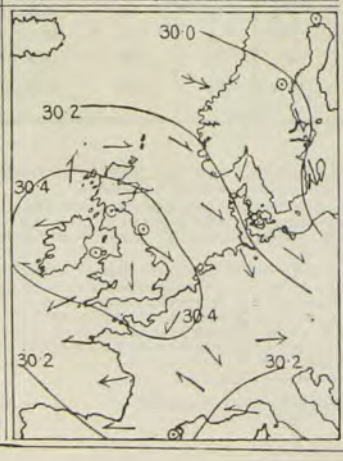
Temperature fallen in Scandinavia and the south of France, but risen over the greater part of our Islands; readings over the United Kingdom ranging from 52° at Pembroke and 51° at several of our other western stations to 24° at Loughborough. Decided rise taking place over England later.

Wind South-Westerly in the north of Scotland and west of Norway, and North-Easterly in the west of France, but North-Westerly or Northerly elsewhere; light or moderate in force in most places. Subsequently increasing to gale from North-West in the west of Norway.

Sea moderate to smooth.

Barometer falling in most localities. Anticyclone with readings above 30·7 ins. still lying over Ireland, with low pressure in the north of Sweden. Rather deep depression subsequently moving across Scandinavia in a south-easterly direction.





Friday, November 26.

Weather dull generally, with fog in many parts of our Islands, and rain at Christiansund. Rain falling later in the extreme north of Scotland.

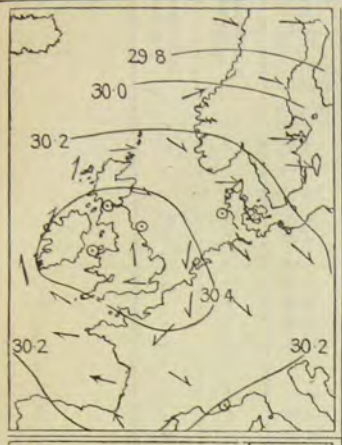
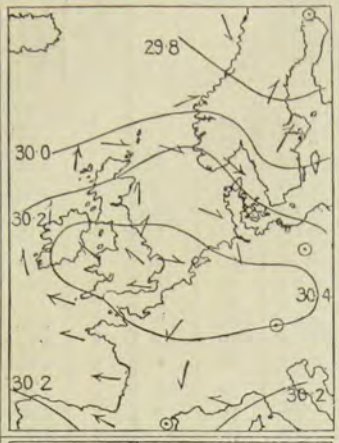
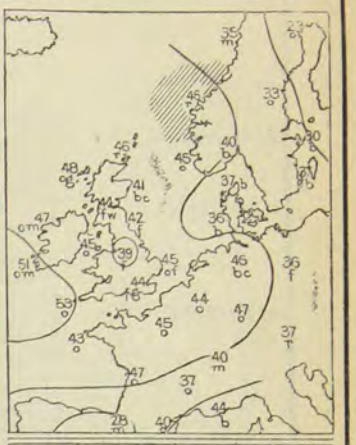
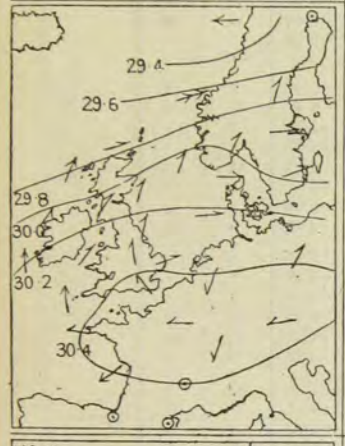
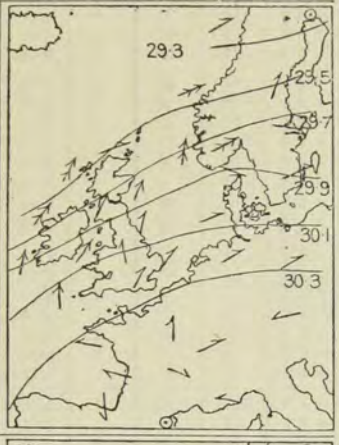
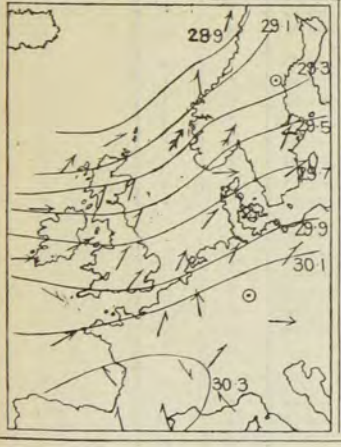
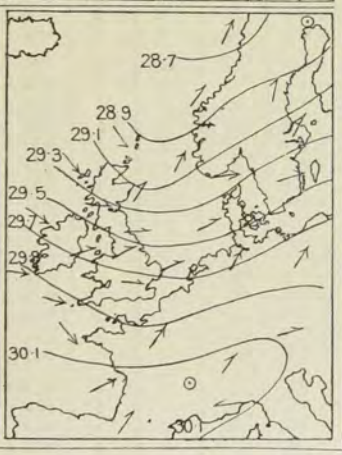
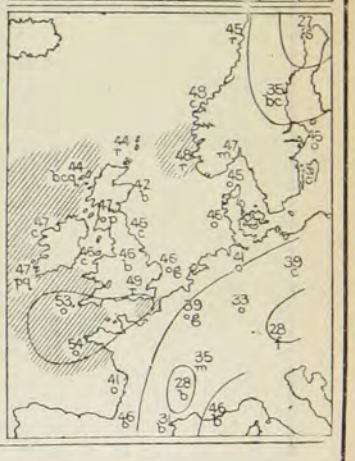
Temperature fallen a little over the greater part of the United Kingdom, but risen elsewhere; readings over our Islands ranging from 52° at Scilly to 35° at Leith and 30° at Parsonstown.

Wind North-Westerly generally, but Easterly or North-Easterly over France and the extreme south of our Islands; strong in force on the eastern shores of the North Sea. Light southerly breezes subsequently appearing in extreme west.

Sea slight or smooth generally.

Barometer falling at nearly all stations. Anticyclone over England and Ireland becoming reduced in height, and depression of previous day passing away over the Baltic. Rise taking place later over Scandinavia and Denmark.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, November 27.** *Weather* fine in Denmark, the south of Scandinavia, and the east of Scotland, but dull elsewhere ; with mist or fog in many places, and rain at some of our western and northern stations. *Temperature* changed irregularly ; readings over our Islands varying from 53° at Scilly to 40° at Nairn and 39° at York. *Wind* Easterly or North-Easterly over the Channel and France, but South-Easterly or Southerly in Ireland, South-Westerly or Westerly in the north of Scotland, and North-Westerly on the eastern shores of the North Sea. Light or moderate in force generally. *Sea* moderate at Stornoway and Yarmouth, but slight or smooth elsewhere. *Barometer* falling in our Islands and France,—most in the west. Anticyclone lying over England, Ireland, and the north of France, with low pressure over the north of Scandinavia. Anticyclone subsequently moving slowly eastwards.	
		**Sunday, November 28.** *Weather* cloudy or overcast generally, with snow at Bodö, rain at Hernösand and Stornoway and mist at several of our southern and south-eastern stations. Rain falling later in the west and north generally. *Temperature* risen in most places ; readings over our Islands ranging from 52° at Valencia to 42° at Aberdeen and Cambridge. *Wind* Easterly over the Channel and greater part of France, but South-Westerly or Westerly elsewhere ; strong in force on our extreme western and northern coasts. Subsequently increasing to gale from South-West in Ireland and Scotland. *Sea* rather rough extreme west. *Barometer* falling at all but the French and German stations. Anticyclonic band extending from the north-west of France to South Germany, with a large and rather deep depression off the north-west of Norway. New disturbance subsequently appearing off the west of Scotland and barometer falling quickly in the west and north of our Islands.	
		**Monday, November 29.** *Weather* fine in the south of France and also at some of our western and northern stations, but cloudy elsewhere, with rain or passing showers in many places. Sky clearing later over the eastern parts of our Islands. *Temperature* risen a little in the south and south-east of England as well as in the west of France, but fallen elsewhere ; readings over our Islands ranging from 52° at Scilly and 51° at Jersey and Dungeness to 41° at Wick. *Wind* Westerly on our western and southern coasts, but South-Westerly elsewhere. Strong in force in Ireland and also on the eastern shores of the North Sea. *Sea* rather rough on our western and southern coasts, as well as at Stornoway. *Barometer* falling generally. Anticyclone lying over Spain and the south of France, with a very large area of low pressure to the northward of our Islands and the westward of Norway. Low pressure area subsequently moving eastwards, and barometer rising in west and north.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 189 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	52	43	49·6	44·3	47·0	+ 6·2	35	0	7	0·94	−0·04	*	*
	Stornoway	53	40	50·6	43·9	47·3	+ 6·9	37	0	4	1·07	−0·02	6	12
	Wick	55	37	52·1	40·0	46·1	+ 6·1	37	6	2	0·39	−0·31	*	*
1. SCOTLAND, E.	Nairn	56	36	51·6	40·3	46·0	+ 6·8	35	5	2	0·33	−0·19	*	*
	Aberdeen	55	33	49·1	36·7	42·9	+ 4·0	29	15	2	0·03	−0·72	18	36
	Leith	53	33	49·9	39·4	44·7	+ 5·3	30	7	3	0·16	−0·42	*	*
2. ENGLAND, N.E.	Alnwick Castle	52	34	48·1	39·1	43·6	+ 4·6	23	8	1	0·02	−0·73	*	*
	Durham	55	28	48·9	36·0	42·5	+ 3·0	29	17	2	0·02	−0·68	23	43
	Shields	55	33	50·4	39·0	44·7	+ 4·3	32	8	0	—	−0·62	*	*
	Scarborough ℜ	52	38	47·5	40·2	43·9	+ 3·9	21	5	1	0·02	−0·70	*	*
	York	53	29	47·0	34·4	40·7	+ 0·8	14	30	2	0·11	−0·41	10	18
	Spurn Head	49	36	46·9	39·7	43·3	+ 2·8	19	6	1	0·05	?	*	*
3. ENGLAND, E.	Hillington ℜ	49	27	46·0	35·1	40·6	+ 0·8	11	27	1	0·01	−0·61	17	30
	Yarmouth	50	33	48·3	39·4	43·9	+ 3·4	24	7	2	0·04	−0·68	*	*
	Geldeston	53	31	49·5	38·2	43·9	+ 3·4	29	11	3	0·06	−0·56	16	28
	Cambridge	51	27	46·9	33·9	40·4	+ 0·5	14	32	2	0·03	−0·43	16	28
	Rothamsted	49	28	46·5	36·5	41·5	+ 2·1	13	22	1	0·04	−0·56	*	*
	Ingatestone	51	32	48·5	37·5	43·0	+ 3·0	26	13	2	0·04	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	50	29	45·7	35·1	40·4	− 0·1	10	27	3	0·09	−0·43	7	13
	Loughborough	50	31	46·7	36·7	41·7	+ 2·2	13	22	2	0·06	−0·47	*	*
	Leicester	49	32	46·4	38·2	42·3	+ 3·5	18	11	3	0·09	−0·44	3	5
	Cheadle ℜ	49	33	45·6	37·8	41·7	+ 2·8	10	17	3	0·15	−0·59	*	*
	Churchstoke ℜ	53	34	47·9	39·6	43·8	+ 4·7	23	7	3	0·29	−0·48	11	20
	Hereford ℜ	53	40	49·0	41·8	45·4	+ 5·6	25	1	3	0·08	−0·47	*	*
	Cirencester	49	28	46·4	36·4	41·4	+ 1·9	12	23	2	0·06	−0·64	8	14
	Oxford	50	28	46·9	36·3	41·6	+ 1·3	14	23	1	0·04	−0·47	9	16
5. ENGLAND, S.	London†	52	28	46·3	35·4	40·9	+ 0·2	12	26	1	0·02	−0·47	3	5
	Strathfield Turgiss ℜ	50	25	46·8	34·8	40·8	+ 0·5	13	29	2	0·09	−0·46	*	*
	Dungeness	52	33	49·7	40·1	44·9	+ 2·2	28	5	2	0·03	−0·77	*	*
	Hastings (St. Leonard's)	52	37	49·2	41·1	45·2	+ 2·5	26	3	4	0·13	−0·58	11	19
	Southampton	52	31	47·9	38·1	43·0	+ 1·8	23	11	2	0·06	−0·64	12	21
	Hurst Castle	52	32	48·4	39·4	43·9	+ 0·7	24	7	2	0·14	−0·54	*	*
	Stowell ℜ	49	28	46·6	36·4	41·5	+ 1·2	13	23	3	0·17	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	57	41	51·5	44·6	48·1	+ 7·5	43	0	6	1·54	−0·67	*	*
	Glasgow	52	33	48·4	42·4	45·4	+ 5·7	24	0	2	0·23	−0·66	4	8
	Ardrossan	53	37	49·7	42·9	46·3	+ 6·6	30	0	2	0·26	−0·65	*	*
	Douglas (Isle of Man)	53	41	50·8	44·1	47·5	+ 5·9	39	0	3	0·24	−0·81	12	22
7. ENGLAND, N.W.	Newton Reigny (Penrith)	51	32	46·5	38·1	42·3	+ 3·0	18	11	2	0·32	−0·48	8	15
	Barrow-in-Furness	49	38	46·7	41·7	44·2	+ 2·1	17	1	6	0·46	−0·40	*	*
	Stonyhurst	49	38	45·2	40·2	42·7	+ 2·9	12	5	5	0·96	−0·13	1	2
	Blackpool ℜ	49	39	47·0	41·9	44·5	+ 2·4	18	0	5	0·34	−0·44	1	2
	Manchester	50	40	46·3	41·9	44·1	+ 3·6	15	0	5	0·59	−0·26	*	*
	Liverpool Obsy (Bidston)	50	40	48·0	43·3	45·7	+ 4·1	26	0	5	0·18	−0·46	*	*
	Llandudno ℜ	54	39	50·4	43·5	47·0	+ 4·0	35	0	3	0·25	−0·54	2	4
	Holyhead	54	43	50·3	46·0	48·2	+ 3·6	43	0	3	0·23	−0·65	*	*
8. ENGLAND, S.W.	Llandovery	53	34	49·0	38·1	43·6	+ 2·6	28	11	4	0·52	−0·67	*	*
	Pembroke	52	42	50·4	45·0	47·7	+ 3·7	40	0	2	0·29	−0·63	8	14
	Arlington (N. Devon)	53	35	?48·1	?39·7	?43·9	?+ 2·6	23	6	?2	?0·53	−0·90	*	*
	Cullompton ℜ	51	29	48·3	37·8	43·1	+ 0·9	25	12	2	0·21	−0·59	5	9
	Falmouth	52	39	50·2	44·8	47·5	+ 2·5	30	0	2	0·33	−0·92	10	17
	Plymouth	53	36	50·9	40·9	45·9	+ 1·9	32	3	2	0·12	−0·70	14	24
	Prawle Point	54	38	50·7	41·9	46·3	+ 2·3	31	0	2	0·23	?	*	*
9. IRELAND, N.	Malin Head	53	39	50·4	44·7	47·6	+ 6·3	39	0	4	0·32	?	*	*
	Londonderry	54	35	50·3	41·6	46·0	+ 4·8	30	1	2	0·69	−0·50	*	*
	Mullaghmore	57	37	51·4	44·6	48·0	+ 5·9	42	0	3	0·50	−0·58	*	*
	Belmullet	53	44	50·9	47·7	49·3	+ 5·0	51	0	5	0·65	?	*	*
	Markree Castle	55	35	50·6	39·5	45·1	+ 3·9	32	7	3	0·54	−0·27	8	15
	Brookeborough	56	29	49·8	36·9	43·4	+ 3·2	31	14	2	0·76	?	*	*
	Armagh	55	35	48·7	39·1	43·9	+ 1·8	25	8	2	0·29	−0·35	9	16
	Donaghadee	53	38	49·4	42·3	45·9	+ 3·9	27	0	3	0·14	−0·54	*	*
	Edgeworthstown	53	35	49·3	38·7	44·0	+ 3·6	28	9	2	0·30	−0·52	*	*
10. IRELAND, S.	Dublin	55	37	51·0	43·9	47·5	+ 5·4	39	0	3	0·06	−0·47	15	27
	Parsonstown	54	29	49·4	35·6	42·5	+ 1·7	30	18	2	0·29	−0·36	6	11
	Kilkenny	56	32	51·1	39·4	45·3	+ 4·3	34	7	2	0·18	−0·44	*	*
	Waterford	55	36	51·1	42·3	46·7	+ 3·7	33	0	2	0·14	−0·76	*	*
	Roche's Point	58	41	54·0	43·7	48·9	+ 5·0	48	0	2	0·28	−0·78	*	*
	Valencia	56	40	53·3	44·3	48·8	+ 2·6	48	0	3	0·37	−0·91	14	25
	Killarney	59	34	52·3	40·8	46·6	+ 2·2	37	3	3	0·64	?	*	*
	Foynes	52	35	49·4	?38·5	?44·0	?+ 1·6	29	10	3	0·72	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	46	52·3	47·7	50·0	+ 7·2	56	0	4	0·17	−0·71	*	*
	Jersey (Noirmont)	52	41	50·1	42·9	46·5	+ 1·7	32	0	2	0·32	−0·66	10	17

Stations marked ℜ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 49.] *New Series.* WEEK ENDING MONDAY, 6TH DECEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 196.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	48	21	40·6	30·9	36·0	4 below.	0	42	1750	−121	746	+ 61
	1. SCOTLAND, EAST	54	17	40·9	29·9	35·7	3 below.	0	44	2339	− 39	836	+ 93
	2. ENGLAND, N.E.	54	21	41·9	30·7	36·5	3 below.		39	2536	− 26	779	+140
	3. ENGLAND, EAST	55	15	42·2	28·3	35·5	4 below.		50	3035	+ 90	848	+177
	4. MIDLAND COUNTIES	56	17	43·6	29·3	36·7	3 below.	4	47	2954	+ 48	814	+119
	5. ENGLAND, SOUTH	56	18	45·2	29·8	37·8	3 below.	9	47	3319	+107	668	+168
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	52	24	44·9	34·2	39·8	1 below.		1	2341	−179	626	+ 81
	7. ENGLAND, N.W.	54	18	44·1	33·8	39·2	2 below.	6	32	2640	− 50	653	+152
	8. ENGLAND, S.W.	54	24	47·3	34·2	41·1	2 below.	15	33	3054	− 76	535	+234
	9. IRELAND, NORTH	55	20	44·8	33·9	39·5	2 below.	8	31	2504	−118	547	+ 65
	10. IRELAND, SOUTH	56	26	47·8	36·9	42·6	0 (average).	26	14	2930	− 73	430	+ 93
	— CHANNEL ISLANDS	54	34	49·2	41·0	45·3	1 below.	27	3	3510	+ 42	205	+ 99

Rainfall. **Bright Sunshine.**

	DISTRICTS. (See p. 196.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	18	8 more.	239	+22	33·9	− 0·2	8	17	1235	+ 79	30	+ 2
	1. SCOTLAND, EAST	5	8	2 more.	187	+ 4	22·9	− 2·4	15	31	1344	− 23	31	− 1
	2. ENGLAND, N.E.	4	3	4 less.	181	+ 2	25·8	− 0·7	24	47	1138	−111	27	− 2
	3. ENGLAND, EAST	5	7	1 more.	175	− 9	22·9	− 3·2	15	28	1475	− 45	35	− 1
	4. MIDLAND COUNTIES	5	6	0 (average).	185	+ 8	29·1	+ 1·0	17	32	1215	−148	29	− 3
	5. ENGLAND, SOUTH	5	7	0 (average).	176	+ 7	27·4	+ 0·6	20	36	1461	+ 3	34	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	6	14	1 more.	200	+ 5	42·4	+ 4·1	14	27	1186	−127	28	− 2
	7. ENGLAND, N.W.	6	12	4 more.	194	+11	38·9	+ 5·0	16	30	1213	− 96	29	− 2
	8. ENGLAND, S.W.	6	11	1 more.	197	+ 3	40·5	− 1·1	17	30	1395	−181	33	− 4
	9. IRELAND, NORTH	6	13	5 more.	211	− 6	38·0	+ 2·3	9	16	1062	−182	25	− 4
	10. IRELAND, SOUTH	6	7	1 less.	207	+ 5	40·5	+ 3·0	11	20	1229	−190	29	− 4
	— CHANNEL ISLANDS	6	10	0 (average).	225	+14	32·7	+ 0·6	17	29	1758	−102	42	− 2

General Remarks.

Weather has been cloudy or dull generally, with frequent falls of rain, sleet, or snow. In many parts of Scotland the snowfall was rather heavy.

Temperature has been about equal to the mean in "Ireland, S.", but in all other districts it has been below, the deficit varying from 1° to 2° over the more western parts of the Kingdom and from 3° to 4° in the south, east, and north. The highest of the maxima, which were generally recorded either on the 5th or 6th, varied between 48° in "Scotland, N." and 56° in the "Midland Counties", "England, S.", and "Ireland, S." The lowest of the minima were registered in most places on the 3rd, when the thermometer fell to between 15° and 18° over eastern, southern, central, and north-western England to 17° in "Scotland, E." and to between 20° and 26° in most other parts of the Kingdom. In the "Channel Islands" the lowest reading was 34°.

Rainfall has been rather less than the mean in "England, N.E." and "Ireland, S.", but elsewhere it has generally exceeded the normal value; in "Scotland, N." and "Ireland, N." the excess has been considerable.

Bright sunshine shows a slight increase in most districts, the percentages of the possible amount of duration ranging from 16 in "Ireland, N." and 17 in "Scotland, N." to 36 in "England, S." and 47 in "England, N.E."

Depressions observed.—During this period pressure has been comparatively high in the south-western and southern parts of our area, while some large depressions have appeared over Scandinavia and some small subsidiary disturbances over the more northern parts of our Islands. Fresh or strong North-Westerly winds were general over the United Kingdom during the earlier part of the period, and on our western and northern coasts they occasionally blew with the force of a gale. Towards the end of the week, however, South-Westerly and Westerly breezes became prevalent, and were generally moderate in force.

A 24575. 350.—12/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

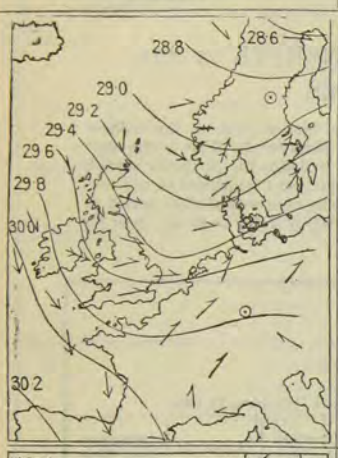
Weather

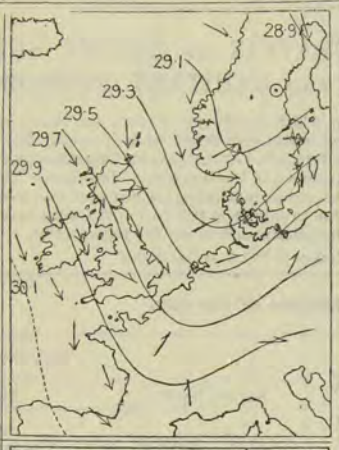
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, November 30.

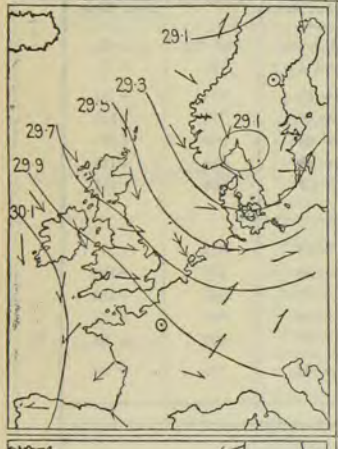
Weather fine in Denmark, Sweden, and the east of England, but showery on our north and north-west coasts, and rainy in the west of Norway and south of France. Snow showers falling in Scotland later.

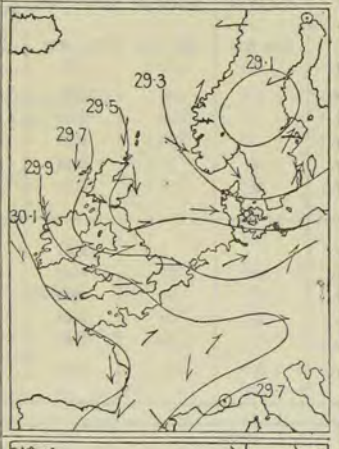
Temperature fallen at all but the southern French stations; readings over our Islands ranging from 47° at Scilly 35° at Oxford and Cambridge.

Wind strong North-Westerly or Northerly in the west and north, but moderate Westerly in the east and South-Westerly on the eastern shores of the North Sea. Subsequently veering to the North-West in the east and south.

Sea rough on our west coasts, but slight in the east.

Barometer falling at all but our western and northern stations. Pressure high over Portugal and low (28·6 ins.) in the extreme north of Sweden, with some shallow disturbances in the intervening regions. Rise taking place generally later.





Wednesday, December 1.

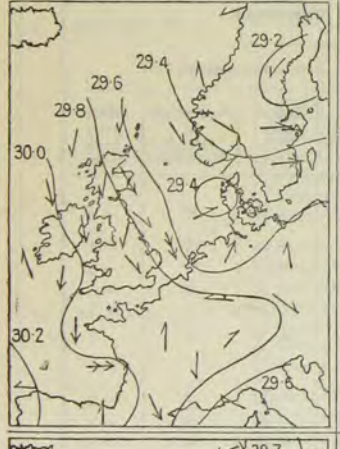
Weather fine over the greater part of England, Ireland, and France, but snow or hail showers falling in Scotland and the extreme north of Ireland. Heavy snow storm occurring in north and west of Scotland later.

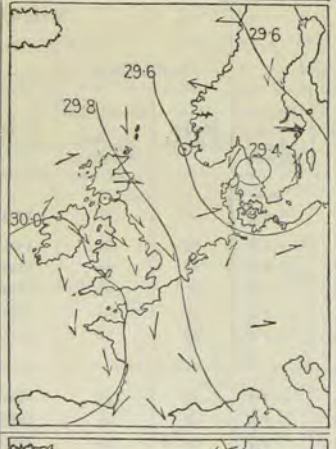
Temperature risen very generally; readings over our Islands ranging from 47° at Scilly to 29° at Wick. Frost occurring over Great Britain at night.

Wind fresh North-Westerly on our western and northern coasts, but moderate Westerly in the east, and light South-Westerly over Germany, the east of France, and the south of Sweden. Fresh North-Westerly gale experienced later on our extreme north-west coasts. and severe Northerly gale at Stornoway.

Sea rough at Spurn Head, and rather rough on exposed parts of our western coasts.

Barometer rising in most places. Pressure highest to the south-westward of our Islands, with depressions over Scandinavia. Well-marked subsidiary disturbance appearing over Scotland in afternoon, and barometer falling quickly in north.





Thursday, December 2.

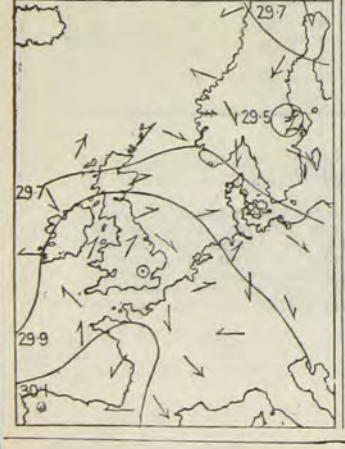
Weather fine over the southern parts of our Islands and France, but cloudy elsewhere, with snow showers in many places.

Temperature risen slightly in the north of Scotland and west of France, but fallen elsewhere; readings over our Islands ranging from 45° at Scilly to 27° at Leith, Shields, Loughborough, and Cambridge. Hard frost occurring over Great Britain at night.

Wind light or moderate from South-West over Germany, Denmark, and the south of Sweden, but North-Westerly or Northerly in most other localities, strong in force on exposed parts of our coasts. Subsequently falling light and backing to South-West on our extreme north-west coast.

Sea rough at several of our western stations, and also at Yarmouth.

Barometer rising at all but the French and German stations. Pressure highest in the north-west of Spain, with a depression over the Gulf of Bothnia and another over Denmark. Fall taking place later on our extreme western coasts.



Friday, December 3.

Weather fine over England and the east of Scotland, but cloudy elsewhere, with rain in the Shetlands and Hebrides, and snow at some of the Scandinavian, German, and French stations.

Temperature risen in the north of Scotland and south of Ireland, but fallen several degrees elsewhere; readings ranging from 46° at Roche's Point to 19° at Loughborough and 18° at Aberdeen. Rapid rise taking place over Great Britain later.

Wind Easterly in the west of France, and South-Easterly in Ireland, but Westerly or North-Westerly over our east coasts and the North Sea. Subsequently backing to South-West or South in the east.

Sea rather rough at Stornoway and Spurn Head, but moderate to smooth elsewhere.

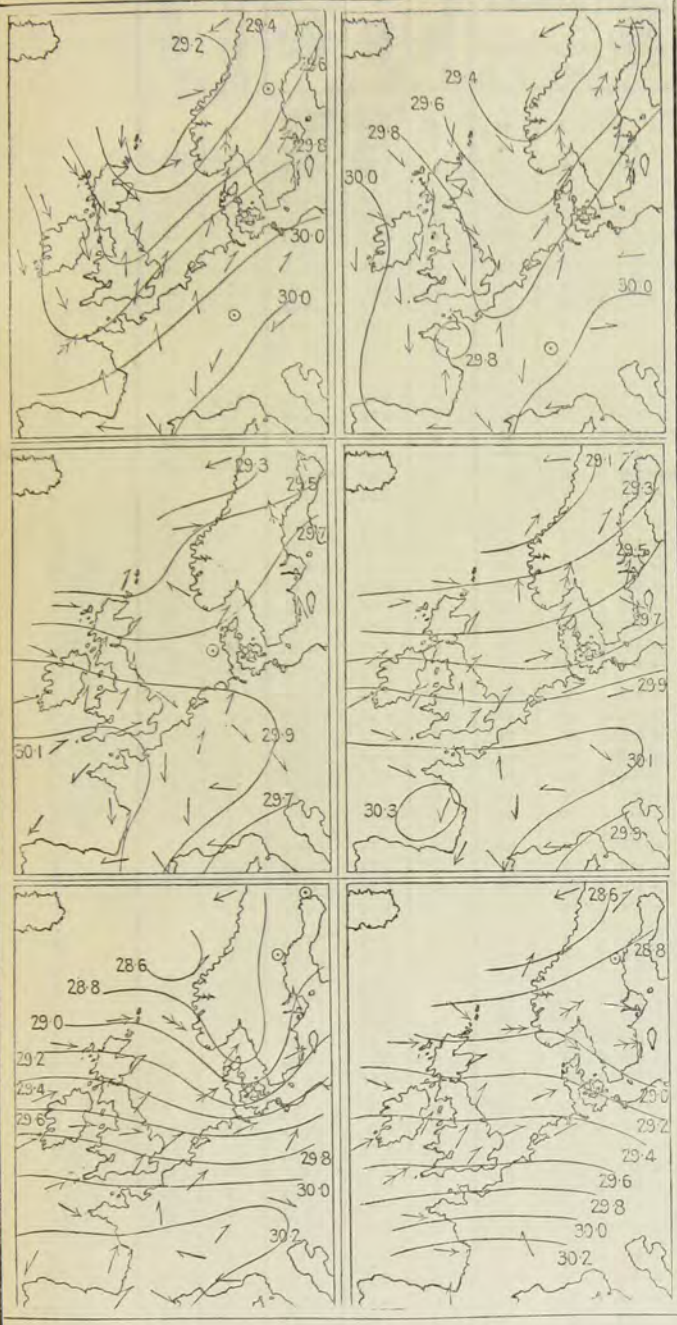
Barometer rising at all but our western and northern stations. Anticyclone lying over England and France, with a band of low pressure extending from the Baltic to the northward of our Islands. Large depression appearing off the west of Norway in evening.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**



Weather

During the 24 hours succeeding

8 a.m. on the dates given.

Saturday, December 4.

Weather rainy over the southern part of England and Ireland as well as in the north of France. Fine at some of our western and northern stations, but snow falling at Sumburgh Head, Stornoway, and York. Improvement taking place over our Islands later.

Temperature fallen over France, but risen quickly elsewhere; readings over our Islands ranging from 51° at Scilly and 50° at Valencia to 32° in the Shetlands. Sharp frost occurring over England at night.

Wind fresh from North-West or North on our western and northern coasts, but South-Westerly or Southerly elsewhere. Subsequently veering to the Northward over the whole of the United Kingdom.

Sea rough off the south of Norway and rather rough at Sumburgh Head, Scilly, and Brest.

Barometer falling generally. Pressure high over France and Germany, with a large area of low readings off the west of Norway. Low pressure system subsequently moving eastwards, and barometer rising in all parts of our Islands and Scandinavia.

Sunday, December 5.

Weather fine in Denmark, France, and the south-east of England, but cloudy elsewhere, with rain at several of our western stations. Rain falling later in most parts of the Kingdom.

Temperature risen on our western and northern coasts, but fallen elsewhere; readings ranging from 52° at Valencia to 29° at Loughborough. Brisk rise taking place over England later.

Wind moderate Westerly or South-Westerly in our Islands, but Southerly in Sweden and Northerly in France. Subsequently blowing strongly from South-West on our western and southern coasts.

Sea moderate to smooth.

Barometer falling a little on our western and northern coasts, but rising elsewhere. Pressure high to the south-westward of our Islands, but large area of low readings lying over the north-west of Norway. Fall subsequently taking place at all but the French stations, and low pressure area in the north becoming more pronounced.

Monday, December 6.

Weather fair over the west and north of England, and fine in the south of France, but dull elsewhere, with rain at several of the Scandinavian and Scotch stations. Rain falling generally later.

Temperature fallen in Ireland and the north of Scotland, but risen several degrees elsewhere; readings varying from 52° at Valencia and Scilly to 38° at Stornoway.

Wind variable in the south of France, and calm in the north of Sweden, but South-Westerly or Westerly in most other localities; strong in force in many parts of our Islands. Subsequently increasing to gale on our South-West coasts.

Sea rough at Pembroke, and rather rough on our west and south-west coasts generally.

Barometer falling at all but the southern French stations. Pressure high over Spain and the south of France, with a depression off the west of Norway. Subsidiary disturbances subsequently appearing over Ireland and England, and moving eastwards.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 193 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	46	26	41·0	31·7	36·5	− 4·2	0	39	7	1·08	+0·10	*	*
	Stornoway	48	25	42·0	31·9	37·2	− 3·1	0	34	7	2·74	+1·58	8	17
	Wick	44	21	38·9	29·0	34·2	− 5·7	0	55	7	1·54	+0·82	*	*
1. SCOTLAND, E.	Nairn	54	23	41·0	29·3	35·4	− 3·5	0	46	6	1·19	+0·68	*	*
	Aberdeen	43	17	38·7	28·1	33·7	− 4·8	0	58	6	0·70	−0·05	15	31
	Leith	52	26	43·1	32·4	38·0	− 1·0	3	36	4	0·47	0·00	*	*
2. ENGLAND, N.E.	Alnwick Castle	50	24	40·7	32·4	36·7	− 2·1	0	37	2	0·25	−0·50	*	*
	Durham	52	22	41·7	30·9	36·5	− 2·6	0	39	3	0·09	−0·62	27	53
	Shields	54	23	42·9	29·1	36·3	− 3·7	3	48	3	0 17	−0·44	*	*
	Scarborough ¶	52	24	41·1	31·9	36·7	− 2·6	0	37	4	0·36	−0·34	*	*
	York	52	21	42·7	28·1	35·7	− 3·6	2	51	4	0·39	−0·15	21	40
	Spurn Head	50	28	42·1	32·0	37·3	− 2·5	0	37	6	0·38	?	*	*
3. ENGLAND, E.	Hillington ¶	51	18	41·1	28·5	35·1	− 4·1	0	48	4	0·90	+0·29	14	26
	Yarmouth	51	21	41·1	28·3	35·0	− 4·9	0	49	6	0·97	+0·26	*	*
	Geldeston	53	15	40·7	27·7	34·5	− 5·5	0	53	6	0·70	+0·10	18	33
	Cambridge	55	20	43·6	26·3	35·3	− 4·0	4	59	4	0·41	−0·04	14	25
	Rothamsted	53	19	43·5	30·2	37·1	− 1·8	4	44	4	0·41	−0·19	*	*
	Ingatestone	53	22	43·2	28·7	36·2	− 3·6	3	49	4	0·48	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	52	20	42·6	30·3	36·7	− 3·5	2	43	4	0·25	−0·27	20	37
	Loughborough	55	19	43·4	27·3	35·7	− 3·2	4	55	5	0·49	−0·04	*	*
	Leicester	54	22	42·1	30·3	36·4	− 1·9	0	42	5	0·81	+0·27	10	19
	Cheadle ¶	51	22	41·0	30·2	35·8	− 2·8	0	43	5	0·99	+0·25	*	*
	Churchstoke ¶	53	23	44·7	31·5	38·4	− 0·7	8	41	5	0·98	+0·25	17	31
	Hereford ¶	56	21	46·0	29·1	37·9	− 1·5	11	50	5	0·29	−0·26	*	*
	Cirencester	53	17	43·3	27·0	35·5	− 3·7	4	56	6	0·46	−0·22	22	40
	Oxford	54	22	44·7	28·7	37·0	− 3·0	8	51	3	0·26	−0·25	18	33
5. ENGLAND, S.	London†	54	21	44·7	27·9	36·6	− 3·6	8	53	5	0·52	+0·04	8	14
	Strathfield Turgiss ¶	54	18	45·5	26·8	36·5	− 3·5	10	58	3	0·46	−0·07	*	*
	Dungeness	52	19	45·4	27·9	37·0	− 5·2	10	54	3	0·55	−0·22	*	*
	Hastings (St. Leonard's)	53	25	42·6	31·9	37·5	− 4·7	2	38	6	0·75	+0·07	29	52
	Southampton	56	23	46·1	32·9	39·8	− 0·5	11	37	4	0·89	+0·19	23	41
	Hurst Castle	52	23	46·9	30·9	39·2	− 3·7	14	44	5	0·91	+0·24	*	*
	Stowell ¶	53	25	44·9	30·5	38·0	− 2·1	8	44	6	0·51	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	54	28	44·8	34·7	40·0	− 0·6	8	29	7	2·65	+0·45	*	*
	Glasgow	51	27	42·1	31·8	37·1	− 2·6	0	37	4	0·73	−0·19	16	33
	Ardrossan	51	28	47·0	35·3	41·4	+ 1·9	14	29	6	0·37	−0·53	*	*
	Douglas (Isle of Man)	52	24	45·5	35·0	40·5	− 1·1	10	29	7	1·94	+0·91	11	21
7. ENGLAND, N.W.	Newton Reigny (Penrith)	52	18	41·2	29·0	35·3	− 3·6	0	47	4	0·96	+0·16	20	39
	Barrow-in-Furness	51	27	44·4	34·0	39·4	− 2·5	7	31	6	1·50	+0·66	*	*
	Stonyhurst	50	22	42·7	30·8	37·0	− 2·2	2	41	5	1·31	+0·20	19	36
	Blackpool ¶	51	24	44·6	33·2	39·1	− 2·8	7	34	6	1·05	+0·28	16	30
	Manchester	51	24	41·6	31·2	36·6	− 3·6	0	38	6	1·04	+0·19	*	*
	Liverpool Obsy (Bidston)	54	31	45·4	36·3	41·0	− 0·2	10	23	7	0·95	+0·33	*	*
	Llandudno ¶	53	32	46·3	37·6	42·1	− 0·6	19	12	7	1·53	+0·66	7	13
	Holyhead	53	33	46·9	38·6	42·9	− 1·5	21	10	7	1·37	+0·49	*	*
8. ENGLAND, S.W.	Llandovery	52	26	44·9	29·6	37·6	− 3·2	8	48	7	1·90	+0·70	*	*
	Pembroke	53	32	47·9	39·6	43·9	+ 0·1	23	7	6	1·03	+0·11	16	29
	Arlington (N. Devon)	51	26	45·9	32·1	39·3	− 1·9	11	39	6	1·61	+0·19	*	*
	Cullompton ¶	53	24	47·0	30·7	39·2	− 2·7	14	46	6	0·76	−0·04	16	29
	Falmouth	53	52	48·2	39·3	43·9	− 1·0	25	8	7	1·12	−0·10	15	26
	Plymouth	54	28	48·6	34·2	41·7	− 1·8	18	34	7	0·72	−0·10	20	35
	Prawle Point	53	31	48·9	34·1	41·8	− 1·7	19	35	6	0·73	?	*	*
9. IRELAND, N.	Malin Head	50	31	45·6	36·6	41·3	+ 0·1	10	23	7	1·00	?	*	*
	Londonderry	55	25	44·7	33·0	39·1	− 2·1	8	35	7	1·56	+0·61	*	*
	Mullaghmore	52	31	46·4	36·1	41·5	− 0·6	12	25	7	2·13	+1·11	*	*
	Belmullet	52	33	46·6	38·3	42·6	− 1·6	20	10	7	1·28	?	*	*
	Markree Castle	54	27	45·3	35·7	39·7	− 1·5	9	33	7	1·59	+0·79	5	9
	Brookeborough	52	20	44·4	31·6	38·2	− 2·0	7	39	4	1·38	?	*	*
	Armagh	53	21	42·6	31·6	37·3	− 3·7	2	38	6	0·97	+0·33	12	24
	Donaghadee	52	25	45·4	33·9	38·3	− 3·6	4	33	7	0·91	+0·25	*	*
	Edgeworthstown	51	25	44·1	30·7	37·7	− 2·5	6	43	5	1·05	+0·27	*	*
10. IRELAND, S.	Dublin	53	28	45·8	35·2	40·8	− 1·1	11	29	5	0·44	−0·09	17	31
	Parsonstown	53	26	45·7	33·6	39·9	− 0·7	10	34	5	0·35	−0·30	7	13
	Kilkenny	53	27	45·9	33·4	39·9	− 0·8	11	35	4	0·41	−0·24	*	*
	Waterford	55	30	47·7	36·0	42·1	− 0·6	26	17	3	0·59	−0·33	*	*
	Roche's Point	55	34	50·0	39·6	45·0	+ 1·3	31	7	6	0·89	−0·18	*	*
	Valencia	54	39	50·4	41·0	47·3	+ 1·1	37	0	7	1·28	−0·01	9	16
	Killarney	56	30	49·2	36·2	43·0	− 1·0	31	16	7	1·01	?	*	*
	Foynes	53	30	47·6	37·1	42·6	− 1·6	25	14	7	0·96	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	54	38	50·4	43·3	47·0	− 0·7	35	0	5	0·34	−0·56	*	*
	Jersey (Noirmont)	53	34	47·9	38·7	43·5	− 0·8	24	9	7	1·61	+0·64	17	29

Stations marked ¶ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 50.] *New Series.* WEEK ENDING MONDAY, 13TH DECEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 200.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	43	25	40·7	33·3	36·7	3 below.	0	37	1750	−126	783	+ 66
	1. SCOTLAND, EAST	47	26	40·9	32·2	37·7	1 below.	0	30	2339	− 46	866	+ 76
	2. ENGLAND, N.E.	47	29	42·4	34·3	38·5	0 (average)	1 *	28	2537	− 34	807	+124
	3. ENGLAND, EAST	53	30	45·6	35·7	40·9	2 above.	10 *	26	3045	+ 91	874	+162
	4. MIDLAND COUNTIES	53	31	45·5	36·0	40·9	2 above.	10	25	2964	+ 48	839	+102
	5. ENGLAND, SOUTH	54	31	48·6	39·0	44·0	3 above.	27	8	3346	+120	676	+144
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	49	29	42·5	34·3	38·5	2 below.	1	28	2342	−187	654	+ 75
	7. ENGLAND, N.W.	50	27	44·3	36·6	40·6	0 (average).	6	22	2646	− 55	675	+143
	8. ENGLAND, S.W.	53	31	48·6	38·7	43·8	2 above.	26	9	3080	− 69	545 †	+224
	9. IRELAND, NORTH	48	27	43·8	34·5	39·4	2 below.	5	29	2509	−124	576	+ 62
	10. IRELAND, SOUTH	53	24	46·8	36·8	42·0	1 below.	13	15	2943	− 76	445	+ 77
	— CHANNEL ISLANDS	53	33	50·3	41·9	46·3	1 above.	31	0	3541	+ 48	205	+ 89

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 200.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	16	7 more.	245	+22	35·5	+ 0·4	1	2	1286	+ 76	30	+ 2
	1. SCOTLAND, EAST	5	10	4 more.	192	+ 6	23·9	− 1·9	9	20	1353	− 28	31	− 1
	2. ENGLAND, N.E.	5	14	7 more.	186	+ 4	27·2	+ 0·1	16	32	1154	−101	27	− 2
	3. ENGLAND, EAST	5	8	3 more.	180	− 8	23·7	− 2·9	16	30	1491	− 38	35	− 1
	4. MIDLAND COUNTIES	6	14	8 more.	191	+11	30·5	+ 1·8	13	25	1228	−142	29	− 3
	5. ENGLAND, SOUTH	7	15	9 more.	183	+10	28·9	+ 1·5	14	26	1475	+ 8	34	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	16	4 more.	205	+ 6	44·1 †	+ 4·9	12	23	1200 †	−120	28	− 3
	7. ENGLAND, N.W.	6	20	11 more.	200	+13	40·9	+ 6·1	9	18	1222	− 92	28	− 3
	8. ENGLAND, S.W.	7	23	11 more.	204	+ 6	42·8	+ 0·1	15	27	1410	−175	33	− 4
	9. IRELAND, NORTH	6	17	9 more.	217	− 5	39·7	+ 3·2	9	17	1071	−181	25	− 4
	10. IRELAND, SOUTH	6	27	19 more.	213	+ 7	43·2	+ 4·8	12	23	1241	−191	29	− 4
	— CHANNEL ISLANDS	7	20	11 more.	232	+16	34·7	+ 1·7	14	25	1772	− 98	41	− 3

General Remarks.

Weather has been in an extremely rough and unsettled condition over the whole Kingdom. Heavy falls of rain occurred very generally, while at all our more northern stations showers of hail or sleet were also frequent. Over the southern parts of England some thunder and lightning were experienced. In the Metropolis and its neighbourhood the thunderstorm (at 9 A.M. on Wednesday) was accompanied by a severe hailstorm.

Temperature has ranged from 1° to 3° below the mean in Ireland and Scotland and has been about equal to it over the north of England, but in all the other English districts it has been 2° or 3° above the normal value. The highest of the maxima, which were recorded on different dates in the various parts of the Kingdom, ranged from 43° in "Scotland, N." to 54° in "England, S." The lowest of the minima, which were also registered on irregular dates, varied between 24° and 27° in Ireland, 25° and 29° in Scotland, and 27° and 31° in England. In the "Channel Islands" the lowest reading was 33°.

Rainfall has been more than the mean in all districts. In most localities the excess has been considerable, but especially so in "Ireland, S."

Bright sunshine has been very little prevalent, the percentages of the possible amount of duration ranging from 32 in "England, N.E." to 17 in "Ireland, N.", and to only 2 in "Scotland, W."

Depressions observed.—Soon after the commencement of this period an abnormally deep depression approached our western coasts from the Atlantic, and after travelling eastwards to the north of England, moved slowly in a north-easterly direction to Scandinavia and became much less deep. The gales caused by this disturbance over our Islands and the greater part of France were exceedingly violent, both in the front and the rear of the centre, and prevailed, with scarcely any intermission, from late on the 7th till the evening of the 9th. By the 12th the disturbance had apparently filled up over Scandinavia, but another depression which subsequently moved eastwards had been developed over the North Sea, causing moderate to strong Westerly gales in the more southern parts of England and in the Channel. At the end of the period a depression appeared off our south-west coasts and the wind in most parts of our Islands shifted to the Eastward and blew freshly or strongly.

* The corresponding values in last week's Report were "0" and "1" respectively.
† These values have been altered slightly owing to the receipt of further information.

A 24712. 350.—12/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

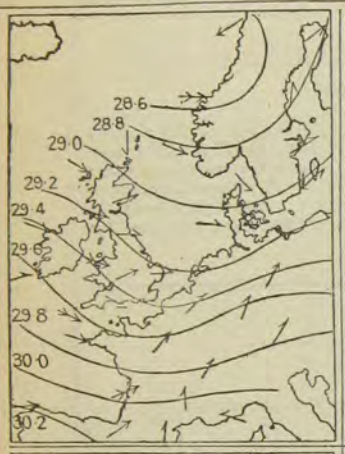
Weather

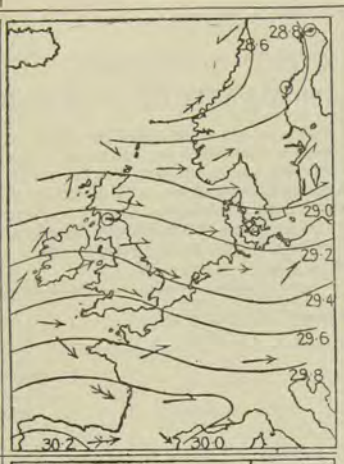
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, December 7.

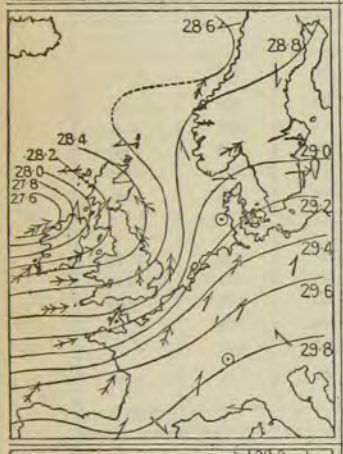
Weather fair generally, but snow falling in the north of Scotland and showers of rain in some other parts of the Kingdom. Rain setting in later on our extreme western coasts.

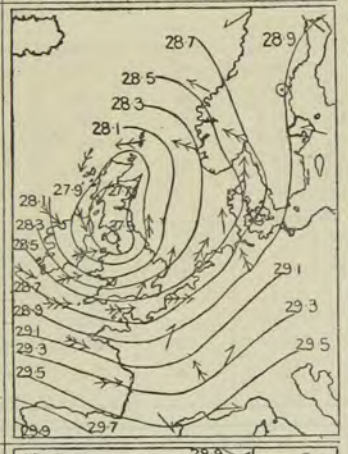
Temperature risen several degrees over Germany and the east of France, but fallen elsewhere; readings over our Islands ranging from 48° at Scilly and Jersey to 33° at Wick and Nairn.

Wind South-Westerly over Sweden, Germany, and France, but Westerly or North-Westerly elsewhere; strong in force at many of our western and southern stations. Subsequently backing to South-West on the west coasts of Ireland and Scotland.

Sea rough on our west and south coasts generally, as well as at Sumburgh Head.

Barometer rising at several of our western and southern stations, but falling elsewhere. Pressure high (30·3 ins.) in Spain and low (28·6 ins.) in the north of Norway. New and somewhat decided fall setting in on our extreme western coasts in evening.





Wednesday, December 8.

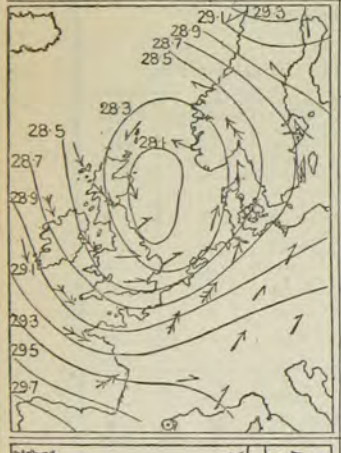
Weather fine in Germany and the east of France, but cloudy elsewhere, with squalls of rain or hail in many places. Thunder and lightning occurring later in many parts of our Islands and France.

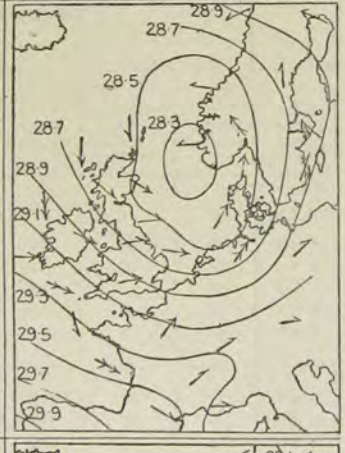
Temperature risen at all but the Continental stations; readings over our Islands ranging from 50° at Hurst Castle and Jersey to 35° at Sumburgh Head, Nairn, Leith, and Parsonstown.

Wind blowing a severe gale from West or South-West on our western and southern coasts, a strong gale from South in the east, and a strong gale from South-East or East in the north. Subsequently veering to North West in Ireland. Violent gale blowing over England, Ireland, and France all day.

Sea high or rough generally.

Barometer falling at all but the Scandinavian and Danish stations—very rapidly on our western coasts. Pressure still highest (30·2 ins.) in the neighbourhood of Lisbon, but centre of exceptionally deep depression, with minimum readings below 27·6 ins., lying off the north-west of Ireland. Depression subsequently moving eastwards, and barometer rising again in Ireland.





Thursday, December 9.

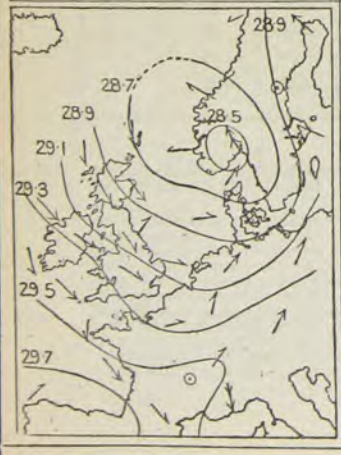
Weather squally and showery generally, with steady rain in the south-east of England. Showers of rain, hail, or sleet falling during greater part of day.

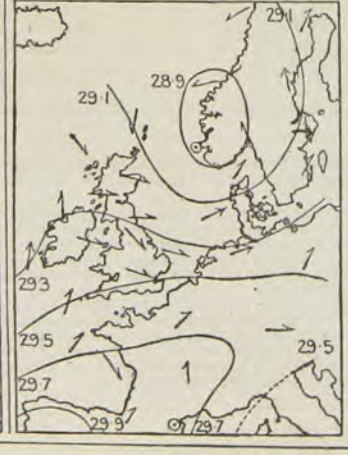
Temperature risen at our north-western and the Continental stations, but fallen elsewhere; readings over our Islands ranging from 45° at Hurst Castle and Jersey to 37° at Nairn and Shields.

Wind blowing a violent gale from North-West on our western coasts, and from West over the Channel and Bay of Biscay, with fresh Southerly gales on the eastern shores of the North Sea, and strong North-Westerly winds in Scotland. Gale in west and south moderating later.

Sea high on all but our east coasts.

Barometer rising rapidly in our Islands and France, but falling briskly in Norway, Denmark, and Germany. Deep depression of previous day now lying over North Sea and becoming shallower. Rise taking place in Norway and Denmark later, and disturbance continuing to grow less deep.





Friday, December 10.

Weather dull in Scandinavian, but fair or fine in most other localities, with, however, showers on our extreme north-west coasts. Showers falling generally later.

Temperature rising in Scandinavia and Denmark, but falling elsewhere; readings over our Islands ranging from 47° at Scilly to 34° in London.

Wind moderate to strong from West or North-West over our Islands and France, but South-Westerly over Denmark, the Netherlands, and Germany, and South-Easterly or Easterly in Scandinavia. Subsequently backing to the Southward on our extreme western coasts.

Sea rough at Holyhead and Scilly, and rather rough in the west and south-west generally.

Barometer rising at all stations, and depression of previous two days filling up over the south of Norway. Slight fall taking place in west later, and new disturbance approaching Ireland.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

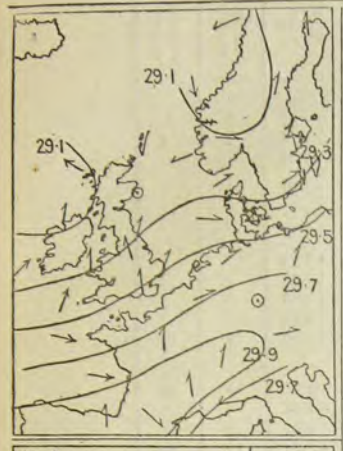
Weather

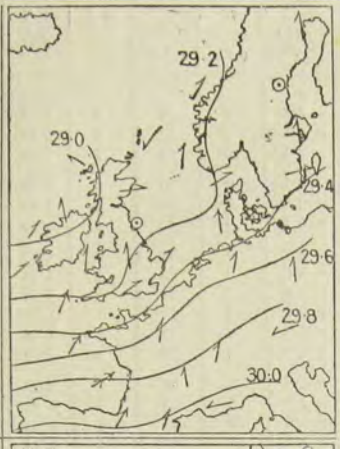
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, December 11.

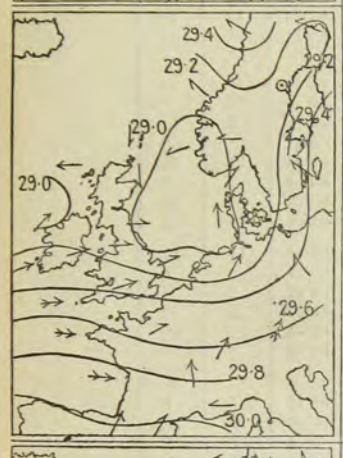
Weather fair in Ireland and the southern parts of Scandinavia and France, but dull elsewhere, with rain in the south of Scotland and south-east of England.

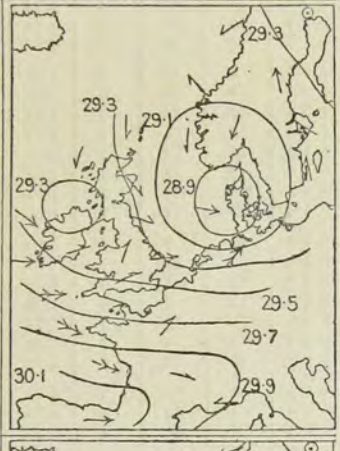
Temperature fallen in the east of Scotland and also at most of the Continental stations, but risen slightly elsewhere; readings over our Islands ranging from 53° at Scilly to 31° at Wick.

Wind fresh South-Westerly or Southerly over the greater part of Ireland and England, but Westerly over the Bay of Biscay and also on the eastern shores of the North Sea. Fresh to strong gale from South-West over the south of England at night.

Sea rough at Prawle Point and rather rough on our south-west coasts generally as well as in the Bay of Biscay.

Barometer falling in the west and south of our Islands but rising elsewhere. Readings highest over Spain, with large but shallow depressions over Norway and our extreme north-west coasts. Fall subsequently taking place generally and further disturbances forming over Great Britain.





Sunday, December 12.

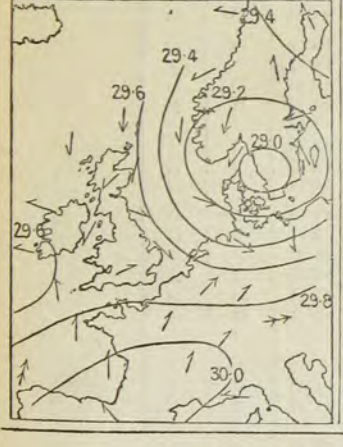
Weather fine over the eastern and northern parts of England and Ireland, but cloudy elsewhere with rain in many places and thunderstorms at some of our southern stations. Some improvement taking place in south later.

Temperature risen several degrees in Germany and the east of France, but fallen a little in the west and south of our Islands; readings over the United Kingdom ranging from 50° at Jersey to 36° at Nairn.

Wind strong to a gale from South-West or West over the Channel and Bay of Biscay, but light from East or North-East on our extreme northern coasts. Subsequently backing to North in Scotland.

Sea high on our south-west coasts, rough at Mullaghmore and rather rough at Stornoway.

Barometer falling on the eastern shores of the North Sea, but rising elsewhere. Pressure highest in Spain with a large depression over the North Sea and a smaller disturbance off our extreme north-west coasts. Rise continuing all day.



Monday, December 13.

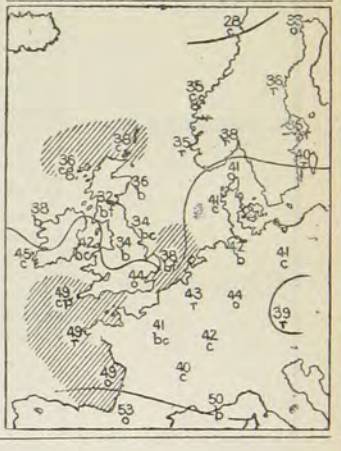
Weather fair over the greater part of our Islands, but dull elsewhere, with rain over the south of Scandinavia and also at the mouth of the Channel. Rain falling later at all our southern stations.

Temperature risen a little in the south of our Islands and the north of Scandinavia, but fallen elsewhere; readings over our Islands ranging from 49° at Scilly to 32° at Ardrossan. Frost occurring at several of our northern stations at night.

Wind moderate Northerly or North-Westerly on our north and east coasts, but Southerly over the Bay of Biscay and the mouth of the Channel, and Easterly in Ireland. Subsequently blowing strongly from east at some of our southern stations.

Sea rough at Scilly, and rather rough in the south-west generally as well as off the north of Scotland.

Barometer falling over the Bay of Biscay and our extreme south-west coasts, but rising elsewhere. Pressure highest over Spain, with a depression over the south of Sweden and another off the south of Ireland. Latter disturbance subsequently growing deeper and advancing to the Channel, occasioning a fall of the barometer at all our southern stations.



Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟩⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 197 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	42	31	40·0	34·0	37·1	− 3·3	0	34	5	1·36	+0·38	*	*
	Stornoway	42	25	40·7	32·0	36·5	− 3·5	0	39	6	2·23	+0·98	1	2
	Wick	43	26	41·4	30·9	36·4	− 3·1	0	39	7	1·32	+0·60	*	*
1. SCOTLAND, E.	Nairn	45	26	40·0	30·3	38·3	− 0·1	0	26	6	0·68	+0·20	*	*
	Aberdeen	43	28	40·7	32·4	36·7	− 0·5	0	37	5	1·47	+0·72	9	20
	Leith	47	32	41·9	33·9	38·1	− 0·4	0	27	4	0·87	+0·40	*	*
2. ENGLAND, N.E.	Alnwick Castle	40	31	39·4	33·9	36·8	− 1·5	0	36	5	1·83	+1·08	*	*
	Durham	45	32	41·6	33·6	37·8	− 0·6	0	29	6	1·51	+0·79	17	34
	Shields	44	32	42·4	33·7	38·2	− 1·5	1	30	5	1·43	+0·82	*	*
	Scarborough ℳ	47	33	43·6	34·6	39·3	+ 0·6	4	28	6	1·37	+0·67	*	*
	York	47	29	43·9	32·7	38·5	− 0·4	5	35	6	1·45	+0·90	15	29
	Spurn Head	46	34	43·4	37·0	40·3	+ 1·3	4	19	4	0·80	?	*	*
3. ENGLAND, E.	Hillington ℳ	50	30	45·1	34·2	39·9	+ 1·2	9	31	5	0·62	+0·02	15	29
	Yarmouth	47	33	43·7	35·9	40·0	+ 0·7	5	24	4	0·64	−0·04	*	*
	Geldeston	52	33	46·5	35·8	41·4	+ 1·8	13	27	4	0·83	+0·27	19	35
	Cambridge	49	32	45·6	35·7	40·9	+ 1·7	10	26	4	0·82	+0·36	14	26
	Rothamsted	53	33	47·4	35·8	41·8	+ 3·3	15	27	7	1·30	+0·71	*	*
	Ingatestone	50	33	45·5	37·0	41·4	+ 2·0	10	21	7	0·77	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	48	32	43·7	34·1	39·1	− 0·6	5	30	6	1·58	+1·04	10	19
	Loughborough	49	34	45·0	37·4	41·4	+ 3·0	8	20	6	0·99	+0·46	*	*
	Leicester	52	34	46·2	36·4	41·5	+ 3·3	12	24	6	0·64	+0·11	8	15
	Cheadle ℳ	48	31	43·7	33·3	38·7	+ 0·4	5	33	6	1·22	+0·47	*	*
	Churchstoke ℳ	50	32	45·6	35·1	40·6	+ 1·9	10	28	7	2·57	+1·86	13	25
	Hereford ℳ	51	33	46·2	37·4	42·0	+ 2·8	12	13	7	1·34	+0·80	*	*
	Cirencester	53	32	?46·9	?36·1	?41·7	?+ 2·7	?14	?25	6	1·27	+0·59	18	33
	Oxford	50	34	46·4	37·9	42·3	+ 3·8	19	11	7	1·48	+0·99	18	33
5. ENGLAND, S.	London†	52	33	48·3	38·7	43·7	+ 3·8	26	9	7	0·89	+0·41	11	20
	Strathfield Turgiss ℳ	54	31	47·9	36·7	42·5	+ 3·0	26	15	7	1·28	+0·77	*	*
	Dungeness	50	37	48·3	41·1	44·8	+ 2·9	23	3	6	1·56	+0·82	*	*
	Hastings (St. Leonard's)	51	35	48·4	38·7	43·7	+ 2·0	26	9	6	1·62	+0·94	14	25
	Southampton	53	35	49·7	38·6	44·4	+ 4·5	31	10	7	1·75	+1·04	18	33
	Hurst Castle	52	38	50·6	41·6	46·3	+ 4·0	32	1	7	1·54	+0·89	*	*
	Stowell ℳ	51	34	47·2	37·8	42·7	+ 2·7	23	12	7	2·04	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	49	29	42·0	31·8	37·1	− 3·3	0	34	5	2·30	+0·11	*	*
	Glasgow	42	30	39·6	34·0	36·9	− 2·4	0	36	4	0·98	+0·03	5	10
	Ardrossan	47	30	43·4	35·7	39·7	+ 0·5	4	24	4	0·46	−0·44	*	*
	Douglas (Isle of Man)	49	31	44·8	35·7	40·4	− 1·0	8	25	6	2·65	+1·62	18	35
7. ENGLAND, N.W.	Newton Reigny (Penrith)	44	27	40·3	31·9	36·3	− 1·9	0	40	6	2·91	+2·12	8	16
	Barrow-in-Furness	48	33	44·0	37·1	40·7	− 0·8	6	20	6	1·56	+0·77	*	*
	Stonyhurst	47	33	43·3	35·0	39·3	+ 0·2	4	26	6	3·26	+2·16	10	20
	Blackpool ℳ	48	32	44·1	37·0	40·7	− 0·9	6	20	6	1·85	+1·08	11	22
	Manchester	49	32	44·6	35·4	40·2	+ 0·4	7	26	6	1·64	+0·79	*	*
	Liverpool Obsy (Bidston)	50	35	44·6	37·6	41·2	+ 0·3	7	18	6	1·63	+1·02	*	*
	Llandudno ℳ	50	36	47·1	38·3	42·9	+ 0·7	22	10	7	1·34	+0·59	6	12
	Holyhead	50	40	46·6	40·7	43·8	− 0·4	18	4	6	1·42	+0·55	*	*
8. ENGLAND, S.W.	Llandovery	51	31	47·1	36·1	41·8	+ 1·2	14	26	7	3·02	+1·80	*	*
	Pembroke	51	38	48·7	42·7	45·8	+ 2·2	27	0	6	1·93	+1·01	9	17
	Arlington (N. Devon)	50	35	46·6	37·0	42·0	+ 1·0	13	14	7	2·49	+1·07	*	*
	Cullompton ℳ	52	31	48·1	37·9	43·2	+ 1·7	26	11	7	2·13	+1·33	13	24
	Falmouth	53	37	49·8	40·0	45·1	+ 0·5	30	6	7	2·89	+1·69	20	36
	Plymouth	54	32	50·4	37·9	44·4	+ 1·3	34	12	7	1·59	+0·76	17	30
	Prawle Point	52	35	49·4	39·1	44·5	+ 1·3	30	8	7	1·99	?	*	*
9. IRELAND, N.	Malin Head	45	34	43·9	36·3	40·3	− 0·7	5	23	6	0·92	?	*	*
	Londonderry	44	30	43·7	33·8	39·0	− 1·8	5	32	6	1·93	+1·02	*	*
	Mullaghmore	48	31	44·4	35·4	40·1	− 1·8	7	26	6	2·23	+1·26	*	*
	Belmullet	48	36	44·9	37·7	41·4	− 2·8	8	18	7	2·10	?	*	*
	Markree Castle	48	27	43·9	33·6	39·0	− 2·1	5	32	7	1·74	+0·96	8	16
	Brookeborough	45	27	42·2	33·1	37·8	− 2·3	1	32	6	1·50	?	*	*
	Armagh	45	29	43·1	33·5	38·5	− 2·1	3	32	7	1·35	+0·71	9	18
	Donaghadee	48	31	44·7	34·9	40·0	− 1·6	8	28	6	1·45	+0·81	*	*
	Edgeworthstown	47	30	43·3	32·4	38·1	− 1·9	4	36	6	1·78	+1·03	*	*
10. IRELAND, S.	Dublin	51	34	45·4	37·2	41·5	− 0·2	10	21	5	1·28	+0·73	19	37
	Parsonstown	49	24	44·6	32·3	38·7	− 1·6	7	38	6	2·89	+2·22	9	17
	Kilkenny	53	28	46·1	34·6	40·6	+ 0·4	11	31	6	2·29	+1·60	*	*
	Waterford	50	34	46·9	36·0	41·7	− 0·8	14	26	6	2·19	+1·27	*	*
	Roche's Point	52	36	47·4	38·1	42·9	− 0·3	23	11	7	2·55	+1·48	*	*
	Valencia	51	41	48·7	42·0	45·5	− 0·2	25	0	7	3·48	+2·18	8	15
	Killarney	52	32	48·8	37·1	43·2	− 0·5	29	14	7	4·00	?	*	*
	Foynes	—	—	—	—	—	—	—	—	7	3·19	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	34	50·1	42·1	46·3	− 1·0	30	0	7	1·88	+0·96	*	*
	Jersey (Noirmont)	52	33	50·4	41·7	46·2	+ 2·2	31	1	7	2·20	+1·28	14	25

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

NOTE.—At Foynes the thermometer screen was blown down by the violence of the gale.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 51.] *New Series.* WEEK ENDING MONDAY, 20TH DECEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

	DISTRICTS. (See p. 204.)	Temperature of the Air. Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	41	16	37·1	26·8	32·1	8 below.	0	69	1750	−132	852	+ 99
	1. SCOTLAND, EAST	41	12	35·2	26·8	31·2	7 below.	0	76	2339	− 52	942	+111
	2. ENGLAND, N.E.	46	18	37·3	23·4	33·0	6 below.	0	63	2537	− 38	870	+149
	3. ENGLAND, EAST	47	15	38·4	27·8	33·3	6 below.	0	61	3045	+ 85	935	+181
	4. MIDLAND COUNTIES	48	18	36·8	27·3	32·3	6 below.	0	68	2964	+ 42	907	+131
	5. ENGLAND, SOUTH	52	17	40·6	31·7	36·3	4 below.	0	40	3347 *	+110	716	+153
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	41	19	36·0	26·8	31·6	8 below.	0	73	2342	−195	727	+119
	7. ENGLAND, N.W.†	45	15	37·5	29·3	33·6	7 below.	0	59	2646	− 63	734	+173
	8. ENGLAND, S.W.	51	7	40·7	31·5	36·3	6 below.	0	40	3080	− 85	584 *	+248
	9. IRELAND NORTH†	44	6	37·6	28·7	33·3	8 below.	0	61	2509	−135	637	+ 95
	10. IRELAND, SOUTH	50	14	37·8	28·2	33·2	9 below.	0	62	2943	−100	507	+116
	— CHANNEL ISLANDS	52	32	44·8	39·5	42·3	3 below.	13	7	3554	+ 35	212	+ 90

	DISTRICTS. (See p. 204.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	11	1 more.	251	+23	36·6	+ 0·5	7	16	1293	+ 80	30	+ 2
	1. SCOTLAND, EAST	4	7	2 more.	196	+ 6	24·6	− 1·8	7	37	1370	− 18	31	− 1
	2. ENGLAND, N.E.	5	12	5 more.	191	+ 5	28·4	+ 0·6	14	27	1168	− 94	27	− 2
	3. ENGLAND, EAST	4	6	0 (average).	184	− 7	24·3	− 2·9	15	29	1506	− 32	35	0
	4. MIDLAND COUNTIES	2	9	3 more.	193	+10	31·4	+ 2·1	12	24	1240	−139	29	− 3
	5. ENGLAND, SOUTH	3	10	3 more.	186	+10	29·9	+ 1·9	15	28	1490	+ 13	34	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	3	2	8 less.	208	+ 5	44·3	+ 4·1	17	34	1217	−108	28	− 2
	7. ENGLAND, N.W.†	4	5	3 less.	204	+13	41·7 *	+ 6·1	14	28	1236	− 83	28	− 2
	8. ENGLAND, S.W.	4	9	2 less.	208	+ 6	43·7	− 0·1	21	39	1431	−161	33	− 4
	9. IRELAND, NORTH †	5	8	0 (average).	222	− 5	40·5	+ 3·2	10	20	1081	−176	25	− 4
	10. IRELAND, SOUTH	3	6	2 less.	216	+ 6	43·8	+ 4·5	21	40	1262	−177	29	− 4
	— CHANNEL ISLANDS	7	9	0 (average).	239	+18	35·6	+ 1·7	19	34	1791	− 88	41	− 2

General Remarks.

Weather was rather mild for the season at the commencement of the period, with much cloud and some heavy falls of rain, but as the week progressed the conditions became very cold and frosty, with occasional showers of snow or sleet. In various parts of Scotland the snowfall was heavy. Lightning was seen in many parts of the Kingdom on the night of the 18th and again in the south on the night of the 19th.

Temperature has been considerably below the mean in all districts, the deficit ranging from 3° in the "Channel Islands" and 4° in "England, S.", to as much as 7° in "Scotland, E.", and "England, N.W.", 8° in "Ireland, N.", "Scotland, N.", and "Scotland, W.", and to 9° in "Ireland, S." The highest of the maxima, which were registered either on the 14th or 15th, varied from 52° in the "Channel Islands" and "England, S." to 41° over Scotland. During the latter part of the period the daily maxima were very low, in several places not reaching 32°. The absolute minima, which were generally recorded on the 20th, were unusually low. In "Ireland, N." (at Brookeborough) the thermometer fell to 6°, in "England, S.W." (at Llandovery) to 7°, over Scotland and in "Ireland, S." to between 12° and 19°, and in most other parts of the Kingdom to between 15° and 18°. In the "Channel Islands" the lowest reading was 32°.

Rainfall has been rather more than the mean in most of the "Wheat-producing" districts, but less in the majority of the "Grazing" districts.

Bright sunshine has not differed materially from that reported last week, the percentages of the possible amount of duration varying from 16 in "Scotland, N." to 39 in "England, S.W." and 40 in "Ireland, S."

Depressions observed.—During the greater part of this period the barometer was generally highest in the extreme southern and south-western parts of our area and relatively high off our north-western coasts. In the intervening region, *i.e.*, over the British Islands and the north of France, some depressions moved in an easterly or north-easterly direction, causing strong Easterly winds or gales to occasionally prevail on our more northern coasts, while in the south the wind was for a time fresh from the South-Westward or Westward and afterwards moderate from East or North-East. Towards the end of the period the barometer rose steadily in the west and the winds over our Islands shifted to the Northward or North-Westward.

* These values have been altered slightly owing to the receipt of further information.
† The values in these districts are liable to alteration owing to the non-arrival of the Returns from Manchester and Markree Castle.

A 24827. 350.—12/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts.

PRESSURE AND WIND.

8 a.m.	6 p.m.

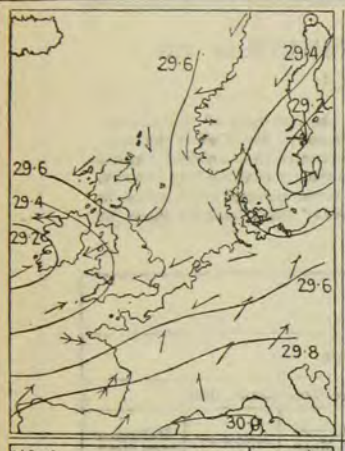
Weather

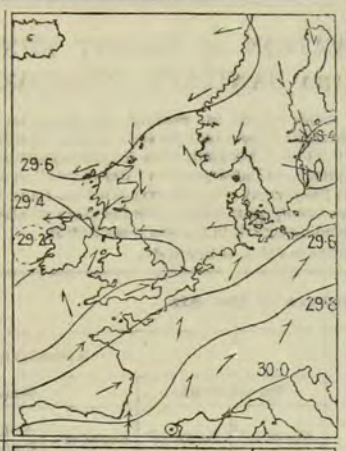
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Tuesday, December 14.

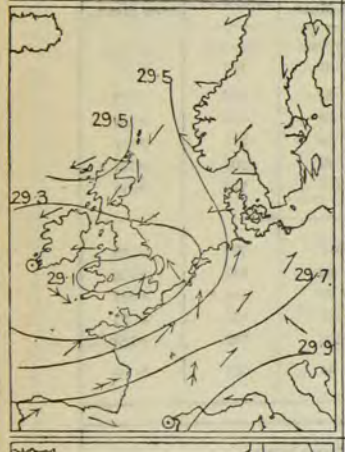
Weather fair in the south of Scotland and east of England, but cloudy elsewhere, with rain in many places. Heavy rain falling later over the greater part of the Kingdom, and snow in Scotland.

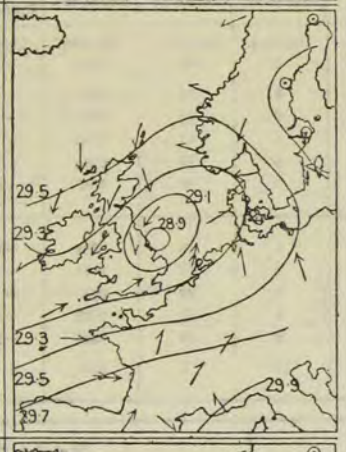
Temperature changed irregularly; readings over our Islands ranging from 50° at Prawle Point and Jersey to 33° in the Shetlands and 32° at York. Frost occurring at night over the northern parts of the Kingdom.

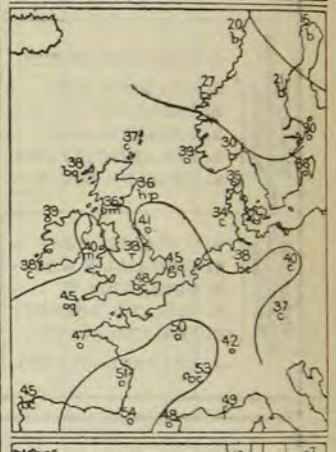
Wind strong South-Westerly or Westerly over France, Germany, and the south-west of our Islands, but moderate Northerly over Scotland and the eastern shores of the North Sea, and strong to a gale from East in the north of Ireland.

Sea very high off the north-west of France, and rough on our west and south-west coasts generally.

Barometer falling at all but the Norwegian and Danish stations. Pressure highest in Spain, with a depression over the south of Ireland and another over the Baltic. Former disturbance subsequently filling up, and latter moving away eastwards.







Wednesday, December 15.

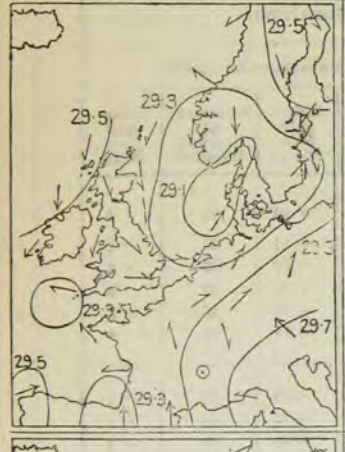
Weather fair in Scandinavia, the extreme north of Scotland, and on our south-west coasts, but cloudy elsewhere, with rain in the eastern parts of England and hail showers at Aberdeen. No important change later.

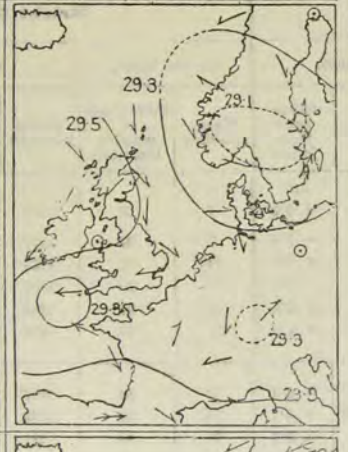
Temperature fallen a few degrees over France, Germany, and the south of England, but changed irregularly elsewhere; readings over our Islands ranging from 50° at Dungeness to 27° at Nairn. Sharp frost occurring at night in many parts of the Kingdom.

Wind strong to a gale from West over the Bay of Biscay, fresh from South over the Netherlands and south-east of England, and moderate to strong from East or North-East on our northern coasts. Subsequently increasing to moderate gale on our extreme north-east coasts.

Sea high off the north-west of France, rough in the western part of the Channel, and rather rough on our south-east, east, and north-west coasts.

Barometer falling at all but the Swedish stations. Pressure highest in Spain, but relatively high over Scandinavia, with a large shallow depression over the south of England. Depression subsequently moving north-eastwards, and barometer rising on all but our east coasts.





Thursday, December 16.

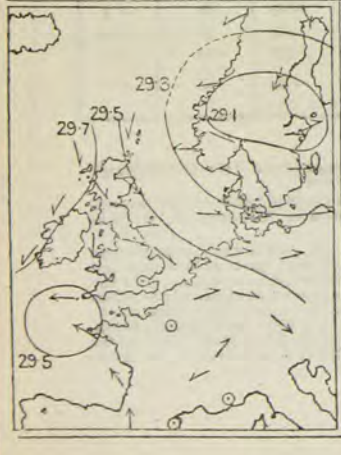
Weather fair over the greater part of England and Ireland, but cloudy elsewhere, with snow in the south of Scandinavia and the north and east of Scotland, and rain at some of the French stations. Rain falling later in the south-west of England.

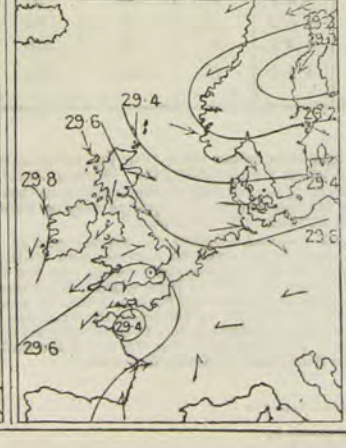
Temperature fallen generally; readings over our Islands ranging from 45° at Scilly to 26° at Parsonstown. Sharp frost occurriug in many parts of the United Kingdom at night.

Wind moderate to fresh from North or North-East on our western and northern coasts, but strong from South-West over the Netherlands and Denmark, and moderate from South-East at the mouth of the Channel. Subsequently backing to North-West in Scotland.

Sea rough or rather so on all the French coasts, and also off the east and south-west of England.

Barometer rising in our Islands, but falling at most of the Continental stations. Pressure relatively high over the Gulf of Bothnia, the west of Scotland, the south-east of France, and the south of Spain, with depression over Denmark and the mouth of the Channel. Former of these disturbances subsequently moving northwards to Scandinavia.





Friday, December 17.

Weather fair over the greater part of Western Europe, but snow showers falling over the northern districts of Ireland and Scotland, and rain in the south-west of France. Snow or sleet falling later in nearly all parts of the United Kingdom.

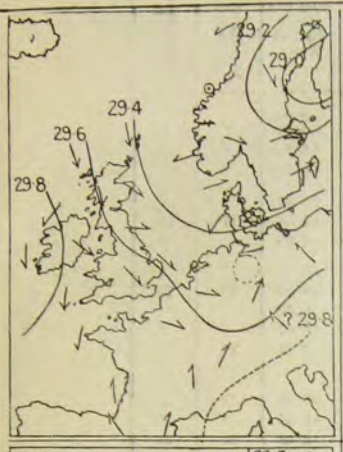
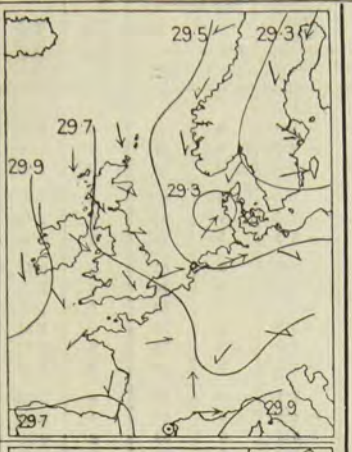
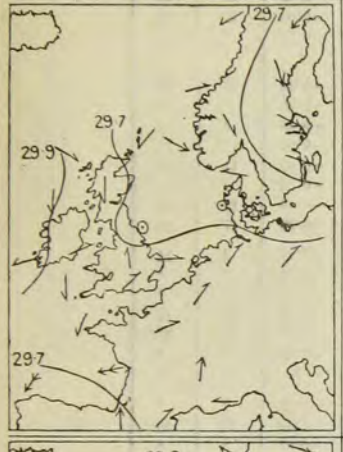
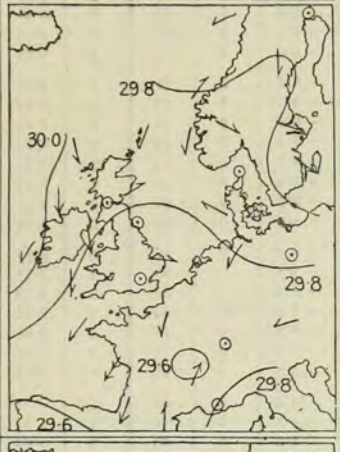
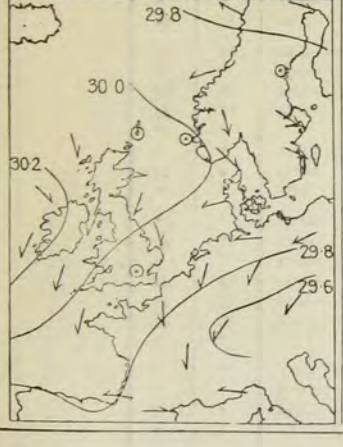
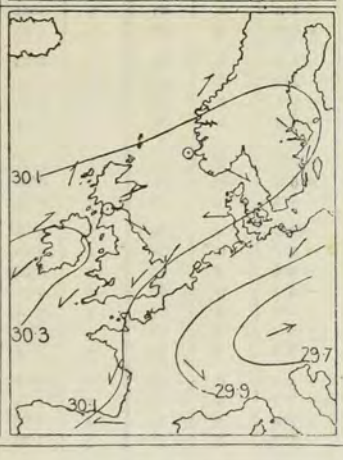
Temperature fallen generally; readings over our Islands ranging from 47° at Scilly to 26° at Stornoway and Cambridge, and 22° at Parsonstown. Maxima below 40° at all but our extreme southern stations.

Wind moderate North-Westerly in Scotland and Westerly on the eastern shores of the North Sea, but North-Easterly on our south-west coast, and South-Easterly in the west of France.

Sea rather rough at the mouth of the Channel and also at Shields.

Barometer rising at all but the Scandinavian and German stations. Pressure relatively high over our extreme western coasts and the east of France, with a large depression over Scandinavia and a smaller one off the mouth of the Channel. Both disturbances moving eastwards later in day.

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Saturday, December 18.** *Weather* fine over the southern parts of Ireland and England, but cloudy elsewhere, with snow in the north of our Islands, and rain at some of the French stations. Thunder and lightning occurring at night in many places. *Temperature* risen in Scandinavia, Scotland, and France, but fallen elsewhere; readings over our Islands ranging from 40° at Scilly to 25° at Parsonstown, and 23° at Cambridge. Maxima below 40° generally, with sharp frost at night. *Wind* moderate North-Westerly or Northerly over the greater part of our Islands, but Southerly in the south of France. Cyclonic circulation prevailing over Germany. *Sea* rather rough at Malin Head, but moderate to smooth elsewhere. *Barometer* falling on our north and east coasts as well as in Germany, but rising in all other localities. Pressure highest off the west of Ireland, with a depression over the Gulf of Bothnia and another over Germany. Later disturbance subsequently moving northwards to Denmark.	
		**Sunday, December 19.** *Weather* fine at our southern and eastern stations, but cloudy elsewhere, with snow or hail showers on our extreme north and north-west coasts. Lightning seen in the south at night. *Temperature* fallen generally; readings over our Islands ranging from 37° at Pembroke to 21° at Loughborough. Maxima below 40° generally, and hard frost occurring over the United Kingdom at night. *Wind* moderate to fresh from North-West on our northern coasts and also on the eastern shores of the North Sea, but Northerly in the west and south of our Islands and variable over central England. *Sea* rather rough at Malin Head, but slight or smooth elsewhere. *Barometer* falling a little at some of our western and northern stations, but rising in all other parts of western Europe. Pressure highest to the westward of our Islands, and low over Sweden and Spain, with shallow depressions over the north-east of Scotland and the Irish Sea. Depression subsequently dispersing, but barometer falling slightly on our southern coasts.	
		**Monday, December 20.** *Weather* fine over the greater part of our Islands, but snow showers falling in the east of England, and steady snow over Germany and the south-west of France. Fog prevailing at some of the more central stations. *Temperature* risen a little over our extreme north-west coasts, but fallen elsewhere, readings over our Islands ranging from 41° at Scilly to 18° at Aberdeen and 14° at Parsonstown. Maxima below 40° at all but one or two of our western stations, and sharp frost again occurring at night. *Wind* light North-Westerly on our north and east coasts, but Northerly or North-Easterly elsewhere. Subsequently backing to South-West in Scotland and the north of Ireland. *Sea* moderate at Scilly, but slight or smooth elsewhere. *Barometer* rising at all but the German and French stations. Pressure highest over Ireland, with a depression over South Germany. High pressure system subsequently moving eastwards, and barometer falling slightly on our extreme north-west coasts.	

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 201 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°	°				Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	39	23	36·9	27·0	32·2	− 8·1	0	69	6	0·29	−0·68	*	*
	Stornoway	41	26	36·9	27·6	32·4	− 7·3	0	67	7	1·99	+0·72	7	16
	Wick	40	16	37·4	25·7	31·8	− 7·4	0	71	6	1·05	+0·34	*	*
1. SCOTLAND, E.	Nairn	38	19	35·1	25·1	30·3	− 7·9	0	82	5	0·71	+0·23	*	*
	Aberdeen	38	12	33·3	26·6	30·2	− 7·8	0	83	5	1·10	+0·35	17	37
	Leith	41	23	37·1	28·6	33·0	− 5·2	0	63	3	0·31	−0·14	*	*
2. ENGLAND, N.E.	Alnwick Castle	41	18	36·6	27·3	32·1	− 6·1	0	69	5	0·87	+0·12	*	*
	Durham	39	21	35·1	25·9	30·7	− 7·5	0	79	5	1·57	+0·85	10	20
	Shields	42	21	38·3	28·6	33·6	− 5·7	0	59	4	1 30	+0·69	*	*
	Scarborough ‡ft	44	23	38·2	30·2	34·4	− 3·9	0	53	6	1·51	+0·83	*	*
	York	39	20	36·3	26·7	31·7	− 7·0	0	72	3	0·77	+0·22	17	34
	Spurn Head	46	25	39·3	31·4	35·5	− 3·0	0	46	4	1·17	?	*	*
3. ENGLAND, E.	Hillington ‡ft	45	17	36·7	25·5	31·3	− 7·1	0	75	4	1·05	+0·47	11	22
	Yarmouth	46	24	38·4	30·4	34·6	− 4·6	0	52	4	0·34	−0·33	*	*
	Geldeston	47	22	39·4	28·5	34·2	− 5·0	0	55	5	0·35	−0·19	18	34
	Cambridge	47	18	39·3	27·1	33·4	− 5·5	0	60	2	0·39	−0·06	17	32
	Rothamsted	46	18	38·2	27·7	33·2	− 5·0	0	62	4	0·68	+0·10	*	*
	Ingatestone	47	15	38·1	27·4	33·0	− 6·3	0	63	4	0·78	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	39	20	34·7	26·9	31·0	− 8·4	0	77	2	1·25	+0·70	11	22
	Loughborough	40	21	36·3	25·9	31·8	− 6·4	0	71	2	0·84	+0·30	*	*
	Leicester	41	20	36·7	26·8	32·0	− 5·9	0	70	2	1·02	+0·48	3	6
	Cheadle ‡ft	38	20	34·8	26·1	30·6	− 7·5	0	80	3	0·73	−0·02	*	*
	Churchstoke ‡ft	39	20	37·0	26·2	31·8	− 6·9	0	71	?2	?0·67	−0·04	11	22
	Hereford ‡ft	43	22	38·7	28·1	33·7	− 5·4	0	58	2	0·83	+0·28	*	*
	Cirencester	46	18	37·4	27·3	32·6	− 6·5	0	66	2	0·57	−0·10	19	36
	Oxford	48	20	38·7	30·3	34·7	− 4·5	0	51	2	1·08	+0·59	17	32
5. ENGLAND, S.	London†	49	21	39·4	31·1	35·4	− 4·0	0	46	3	0·76	+0·27	6	11
	Strathfield Turgiss ‡ft	50	17	38·8	29·0	34·1	− 5·1	0	55	2	0·81	+0·31	*	*
	Dungeness	52	24	43·7	33·6	38·9	− 2·8	5	32	3	1·12	+0·40	*	*
	Hastings (St. Leonard's)	51	27	41·1	32·8	37·1	− 4·5	0	34	6	1·32	+0·64	21	41
	Southampton	51	23	40·7	31·6	36·3	− 3·3	0	40	3	0·88	+0·17	18	33
	Hurst Castle	51	24	41·7	33·4	37·7	− 4·1	0	30	3	0·92	+0·29	*	*
	Stowell ‡ft	48	23	38·6	30·2	34·6	− 5·5	0	52	3	0·94	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	39	19	35·3	24·8	30·3	−10·0	0	82	5	0·37	−1·81	*	*
	Glasgow	38	19	33·4	25·5	29·6	− 9·5	0	87	1	0·02	−0·96	14	30
	Ardrossan	40	21	37·0	27·9	32·6	− 6·6	0	66	1	0·03	−0·87	*	*
	Douglas (Isle of Man)	41	23	38·4	28·9	33·8	− 7·5	0	57	3	0·52	−0·50	19	38
7. ENGLAND, N.W.	Newton Reigny (Penrith)	38	15	33·7	23·3	28·7	− 9·0	0	93	4	0·16	−0·63	15	31
	Barrow-in-Furness	41	25	37·6	30·4	34·1	− 7·2	0	55	3	0·41	−0·37	*	*
	Stonyhurst	40	16	34·9	25·4	30·3	− 8·8	0	82	3	0·43	−0·67	18	36
	Blackpool ‡ft	41	18	37·3	27·4	32·6	− 8·8	0	66	3	0·41	−0·34	17	34
	Manchester												*	*
	Liverpool Obsy (Bidston)	41	26	37·4	31·1	34·4	− 6·3	0	53	5	0·71	+0·11	*	*
	Llandudno ‡ft	43	29	40·0	32·0	36·2	− 6·0	0	41	5	0·88	+0·15	5	10
	Holyhead	45	32	41·7	35·6	38·8	− 5·2	0	22	5	0·49	0·38	*	*
8. ENGLAND, S.W.	Llandovery	44	7	36·9	22·9	30·2	−10·3	0	83	5	1·35	+0·12	*	*
	Pembroke	49	29	40·4	34·9	37·8	− 5·4	0	29	4	0·66	−0·26	27	51
	Arlington (N. Devon)	47	23	39·4	31·0	35·4	− 5·3	0	46	3	0·59	−0·81	*	*
	Cullompton ‡ft	50	20	39·8	29·3	34·8	− 6·4	0	50	2	0·53	−0·28	13	24
	Falmouth	51	25	42·5	35·0	38·9	− 5·7	1	26	7	0·81	−0·39	21	38
	Plymouth	51	25	42·5	32·8	37·8	− 5·3	1	34	5	0·68	−0·15	23	42
	Prawle Point	50	26	43·4	34·7	39·2	− 3·9	4	28	4	1·34	?	*	*
9. IRELAND, N.	Malin Head	43	31	39·4	33·4	36·5	− 4·4	0	39	7	0·78	?	*	*
	Londonderry	40	18	37·7	27·6	32·9	− 7·8	0	64	7	1·11	+0·21	*	*
	Mullaghmore	41	25	38·3	31·9	34·8	− 7·1	0	50	4	0·90	−0·05	*	*
	Belmullet	44	30	40·0	33·1	33·7	− 7·3	0	37	6	1·33	?	*	*
	Markree Castle													
	Brookeborough	38	6	35·7	23·1	29·6	−10·4	0	87	4	0·78	?	*	*
	Armagh	40	10	34·9	24·2	29·8	−10·6	0	85	5	0·58	−0·06	10	20
	Donaghadee	43	24	39·9	31·6	35·9	− 5·5	0	43	4	0·68	+0·04	*	*
	Edgeworthstown	38	17	34·0	25·7	30·0	− 9·9	0	84	1	0·23	−0·48	*	*
10. IRELAND, S.	Dublin	43	24	36·6	28·9	32·9	− 8·5	0	64	4	1·20	+0·65	18	35
	Parsonstown	48	14	34·3	23·6	29·2	−11·0	0	90	4	0·30	−0·33	17	33
	Kilkenny	42	23	36·3	27·4	32·0	− 8·0	0	70	2	0·56	−0·14	*	*
	Waterford	45	24	36·6	29·2	33·1	− 9·1	0	62	2	1·48	+0·55	*	*
	Roche's Point	50	28	40·4	32·3	36·5	− 6·7	0	39	1	0·65	−0·43	*	*
	Valencia	50	29	44·3	35·0	39·8	− 5·9	6	27	5	0·69	−0·62	27	51
	Killarney	47	15	37·2	22·5	30·1	−13·3	0	83	2	0·20	?	*	*
	Foynes	44	23	37·1	26·9	32·2	− 9·7	0	69	1	0·01	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	32	45·6	39·7	42·8	− 4·4	15	6	7	1·03	+0·11	*	*
	Jersey (Noirmont)	52	32	43·9	39·3	41·7	− 2·0	5	11	6	0·80	−0·06	19	34

Stations marked ‡ft are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 52.] *New Series.* WEEK ENDING MONDAY, 27TH DECEMBER, 1886. [*Price 4d.* [*Annual subscription, post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861–80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878–85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866–85, but the *Mean numbers of Rainy Days* are those for the eight years 1878–85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881–85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 208.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	44	17	39·3	29·7	34·7	5 below.	0	51	1750	−140	903	+118
	1. SCOTLAND, EAST	43	12	38·8	27·8	33·5	5 below.	0	60	2339	− 60	1002	+130
	2. ENGLAND, N.E.	42	12	38·3	30·4	34·5	4 below.	0	53	2537	− 46	923	+168
	3. ENGLAND, EAST	43	17	38·4	28·1	33·5	5 below.	0	60	3045	+ 79	995	+208
	4. MIDLAND COUNTIES	49	16	40·2	29·7	35·2	3 below.	0	48	2964	+ 33	955	+144
	5. ENGLAND, SOUTH	47	19	42·5	30·0	36·5	4 below.	1	44	3348	+ 97	760	+171
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST *	48	22	41·3	33·7	37·2	3 below.	0	34	2342	−207	761	+129
	7. ENGLAND, N.W.*	48	11	40·8	32·3	36·7	4 below.	0	37	2646	− 74	771	+182
	8. ENGLAND, S.W.	50	11	45·8	32·1	39·2	3 below.	11	39	3091	− 99	623	+273
	9. IRELAND, NORTH	48	10	41·5	31·5	36·7	4 below.	0	37	2509	−150	674	+109
	10. IRELAND, SOUTH	52	13	44·8	31·2	38·3	4 below.	8	42	2951	−113	549	+139
	— CHANNEL ISLANDS	51	32	48·5	39·4	44·1	1 below.	26	7	3580	+ 33	219	+193

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 208.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	13	3 more.	257	+24	37·9	+ 0·9	9	20	1302	+ 86	29	+ 2
	1. SCOTLAND, EAST	5	6	1 more.	201	+ 7	25·2	− 1·7	8	17	1378	− 20	31	− 1
	2. ENGLAND, N.E.	4	6	0 (average).	195	+ 5	29·0	+ 0·6	14	28	1182	− 85	27	− 2
	3. ENGLAND, EAST	5	15	9 more.	189	− 6	25·8	− 1·9	9	17	1515	− 27	34	− 1
	4. MIDLAND COUNTIES	5	12	7 more.	198	+11	32·6	+ 2·7	15	30	1255	−127	29	− 2
	5. ENGLAND, SOUTH	6	24	18 more.	192	+12	32·3	+ 3·6	14	26	1504	+ 24	34	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST *	5	16	6 more.	213	+ 6	45·9	+ 4·7	9	17	1226	−104	28	− 2
	7. ENGLAND, N.W.*	6	11	3 more.	210	+15	42·8	+ 6·4	13	26	1249	− 73	28	− 2
	8. ENGLAND, S.W.	7	21	10 more.	215	+ 8	45·8	+ 1·0	18	32	1449	−149	33	− 3
	9. IRELAND, NORTH	6	15	7 more.	228	− 3	42·0	+ 4·0	8	16	1089	−174	25	− 3
	10. IRELAND, SOUTH	6	14	5 more.	222	+ 8	45·2	+ 5·0	13	26	1275	−173	29	− 4
	— CHANNEL ISLANDS	7	20	11 more.	246	+21	37·6	+ 2·8	17	30	1808	− 79	41	− 2

General Remarks.

Weather has been in a cold and unsettled condition over the whole Kingdom. During the earlier part of the period falls of rain, sleet, or snow were frequent, but on Sunday steady rain, followed by extremely heavy and continuous snow, set in over all the more southern parts of the Kingdom.

Temperature has been below the mean in all districts. In the "Channel Islands" the deficit was only 1°, but in the other districts it was as much as from 3° to 5°. The highest of the maxima, which were recorded on the 21st at most of the western and northern stations, and on the 24th in most other localities, ranged from 42° in "England, N.E." and "England, E." to 52° in "Ireland, S." The lowest of the minima, which were generally registered on the 21st or 22nd, varied between 10° and 15° in most of the "Grazing" districts, and between 12° and 19° in the "Wheat-producing" districts.

Rainfall has been more than the mean in all districts except "England, N.E."; over southern England the excess (consisting chiefly of melted snow) has been very large. The largest amounts reported at any individual stations for the rain and snow fall of the 26th were 2·88 ins. at Southampton (in nineteen hours), and 2·46 ins. at Stowell. At the latter station as much as 1·96 ins. was yielded by the melted snow alone. At Plymouth 1·8 ins. of rain fell between noon and 6 P.M. during a gale from the north-eastward.

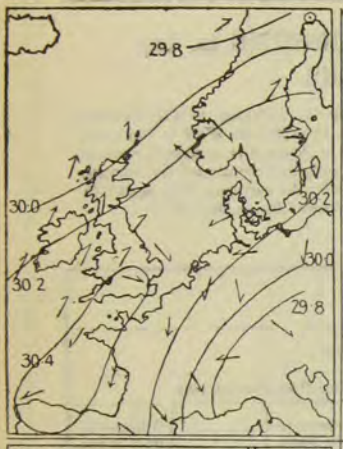
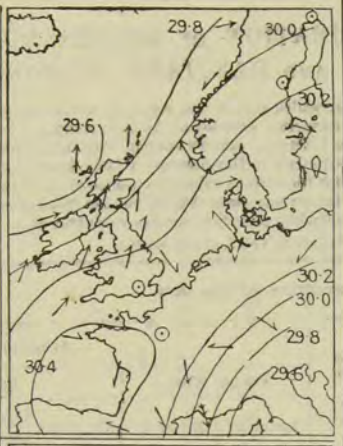
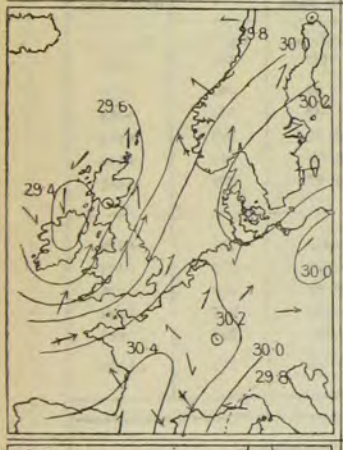
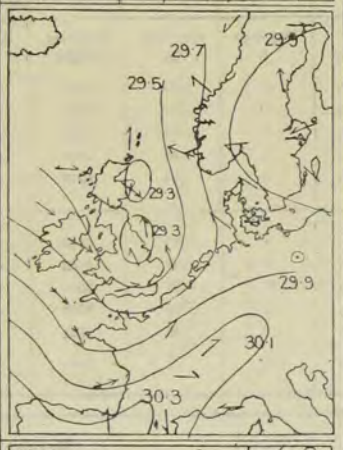
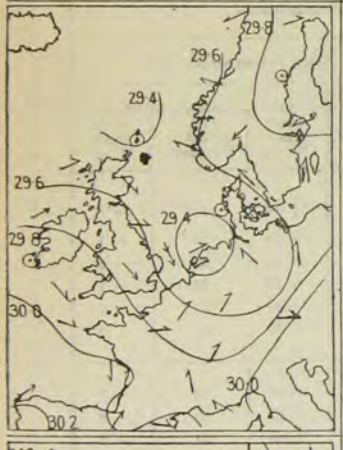
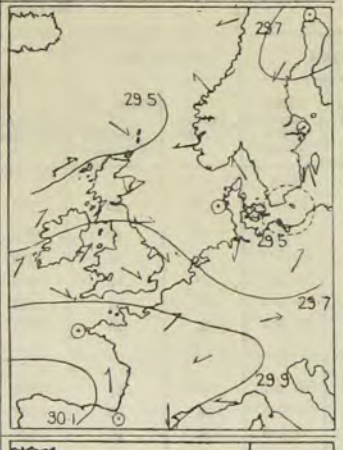
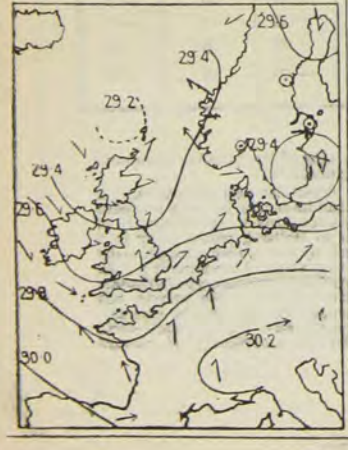
Bright sunshine shows a general decrease, the percentages of the possible amount of duration ranging from 16 in "Ireland, N." to 32 in "England, S.W."

Depressions observed.—As the period commenced a depression was approaching our north-west coasts from the Atlantic. By 8 A.M. on the 22nd its centre lay over northern Ireland, where it broke into two parts, one of which disappeared to the northward of Scotland, and the other, after moving south-eastwards to Holland, passed away in a north-easterly direction to the Baltic. The winds caused by this system were generally strong from the South-Westward, and in many places they attained the force of a gale. On the 24th a depression was shown near the Shetlands and some subsidiary disturbances over England and Scotland. As these passed away the barometer rose briskly, but during the 26th the centre of a deep depression travelled quickly up the Channel, bringing very strong winds or gales to all the more southern parts of the Kingdom,—from the Southward or South-Eastward as the disturbance advanced, and from the Northward or North-Eastward in its rear.

* The values in these districts are liable to alteration owing to the non-arrival of the Returns from Laudale and Llandudno.

A 24888. 350.—12/86. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, December 21.** *Weather* fine over the greater part of England, but thick fog prevailing over England, snow in Germany, and rain in the Hebrides. Rain falling later at most of our western and northern stations. *Temperature* fallen in England, the Netherlands, and the east of France, but risen elsewhere; readings over our Islands ranging from 44° at Belmullet to 17° at Loughborough. Sharp frost over England in early part of night. *Wind* moderate to fresh from the Southward in Ireland and Scotland, but light from North in the east and south of England, and strong from the same quarter over the greater part of France. Subsequently increasing to gale at some of our western and northern stations. *Sea* rather rough on our extreme north-west coasts, but slight or smooth elsewhere. *Barometer* rising at all but the Irish and Scotch stations. Anticyclone, with readings above 30·4 ins., extending from the Bay of Biscay over the south of England, with a depression off our extreme north-west coasts. Fall taking place later in all parts of our Islands.	
		**Wednesday, December 22.** *Weather* fine in the north of Scotland, the south-east of England, and at most of the Continental stations, but cloudy elsewhere, with rain on our west coasts. Rain extending eastwards later, but weather improving in west. *Temperature* risen quickly over the United Kingdom, but fallen in France; readings over our Islands ranging from 50° at Roche's Point to 31° at Cambridge. *Wind* North-Westerly in the west of Ireland, but Southerly or South-Easterly elsewhere; strong in force on many of the English and Irish coasts. Subsequently veering to North-West or West on all our western and southern coasts. *Sea* rough off the south-west of England, and rather rough in the west generally. *Barometer* falling generally. Pressure high in France and also over the Baltic, with rather deep depression over the north of Ireland. Depression subsequently moving eastwards, and dividing into two portions; barometer rising in west.	
		**Thursday, December 23.** *Weather* fine over the greater part of our Islands, but cloudy at many of the Continental stations, with snow at Berlin, Belfort, and Lyons. Showers falling later on our extreme north-west coasts. *Temperature* risen quickly over France and the Netherlands, but fallen elsewhere; readings over our Islands ranging from 47° at Scilly to 34° at Wick and Nairn and 32° at Parsonstown. *Wind* North-Westerly in most parts of our Islands and Westerly over France, but South-Easterly on the eastern shores of the North Sea; strong in force on our south-east coasts, with a gale at Yarmouth. Subsequently backing to South-West at many of our western stations. *Sea* rough on many parts of our eastern and western coasts. *Barometer* falling at all but our western and northern stations. Pressure highest in Spain, with depressions lying respectively to the northward of the Shetlands and off the north of Holland. Latter disturbance subsequently moving eastwards, but new fall of barometer setting-in on our western coasts.	
		**Friday, December 24.** *Weather* cloudy and showery generally with squalls in the west and fog locally. Some improvement taking place over our Islands in evening. *Temperature* risen in most places; readings ranging from 48° at Scilly to 34° at Wick. Frost occurring over the greater part of our Islands at night. *Wind* North-Westerly in Ireland and South-Westerly or Westerly over Great Britain, France, and Germany, but South-Easterly in Norway; light or moderate in force in most places. Subsequently veering to the North-Westward over our Islands generally. *Sea* rather rough on exposed parts of our western and southern coasts, but moderate to smooth elsewhere. *Barometer* falling generally. Pressure highest in Spain and relatively high in the south-east of France, with depressions lying respectively to the northward of our Islands, and over the Baltic. Rise taking place over our Islands later.	

SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

Synoptic Charts.

PRESSURE AND WIND.

8 a.m. | **6 p.m.**

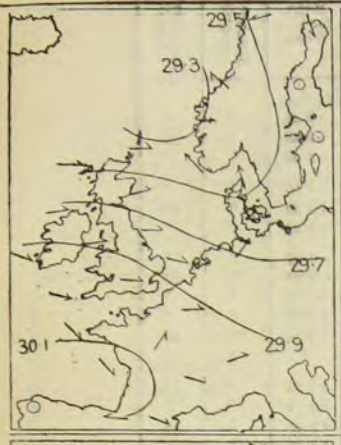
Weather

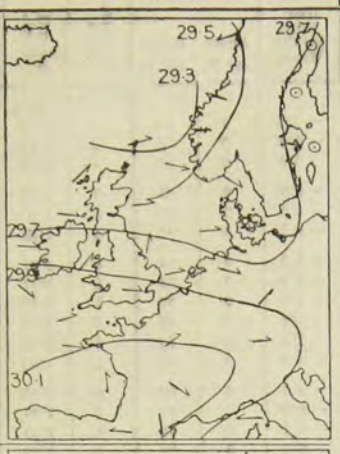
During the 24 hours succeeding 8 a.m. on the dates given.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.





Saturday, December 25.

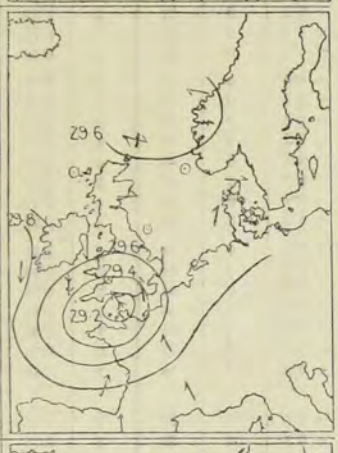
Weather fine over England, Ireland, and France, but dull elsewhere, with snow in the north of Scotland. Some improvement taking place in north later.

Temperature fallen generally ; readings over our Islands ranging from 46° at Scilly to 32° in London, and 31° at Wick, Aberdeen, and Parsonstown. Frost occuring in most places at night.

Wind moderate Westerly in our Islands and North-Westerly in France. Light South-Westerly in Denmark, and South-Easterly or Easterly in the west of Germany.

Sea rough at Stornoway, and rather rough at the mouth of the Channel.

Barometer rising generally. Pressure highest in Spain, with a depression off the north of Scotland, and some subsidiary disturbances off the Danish coasts. Slight fall taking place on our western and northern coasts later.



Sunday, December 26.

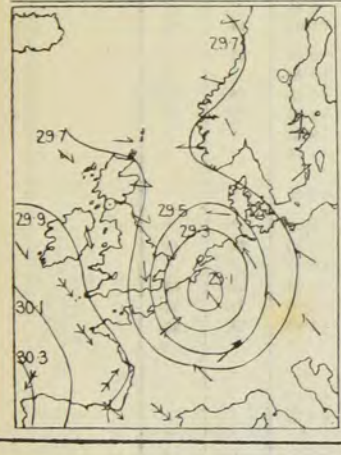
Weather fine in the east of Scotland and south of France, but cloudy elsewhere, with rain in the south of England, and snow showers at Stornoway and Malin Head. Unusually heavy snowstorm occurring over Southern England during evening and night.

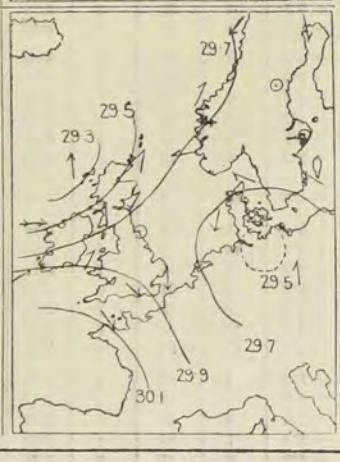
Temperature risen a little over England and Sweden, but fallen elsewhere ; readings over our Islands ranging from 47° at Scilly to 28° at Wick. Hard frost occuring over Scotland at night.

Wind fresh South-Easterly over the Bay of Biscay and the mouth of the Channel, but light Westerly on our northern coasts, and moderate South-Westerly on the eastern shores of the North Sea. Subsequently increasing to strong gale on our southern coasts, from South-East backing to North-East and North.

Sea rough at the mouth of the Channel, but moderate to smooth elsewhere.

Barometer falling at our western, southern, and many of the French stations, but rising elsewhere. Pressure highest over Germany and the east of France, with a large depression off the west of Norway and another approaching our south-west coasts. Latter disturbance subsequently advancing eastward along the Channel, and barometer falling rapidly in south.





Monday, December 27.

Weather fair over the greater part of our Islands, but cloudy elsewhere, with rain and snow over the Netherlands, Germany, and the north-east of France. Rain setting in later at several of our north-western stations.

Temperature risen a little in Ireland and rapidly in the south of France, but fallen elsewhere ; readings over our Islands varying from 46° at Valencia to 19° at Nairn.

Wind high from South-West on our extreme north and north-west coasts, but strong to a gale from the Northward in the east and south. Fresh South-Westerly to North-Westerly gales in France. Wind subsequently moderating in south, but increasing from the Southward in the north.

Sea rough on all the eastern and southern coasts.

Barometer falling in France, the Netherlands, and Germany, but rising elsewhere. Pressure highest over Portugal with centre of yesterday's deep depression near Brussels. Depression subsequently moving away eastwards, but new disturbance appearing off the west of Scotland and occasioning rapid fall of barometer on our north-west coasts.

Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟹ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 205 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°					Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	43	26	41·1	33·0	37·2	− 3·0	0	34	7	1·76	+0·81	*	*
	Stornoway	44	22	39·6	29·1	34·6	− 5·0	0	52	6	1·54	+0·29	9	20
	Wick	42	17	37·3	26·9	32·3	− 6·9	0	68	6	0·57	−0·09	*	*
1. SCOTLAND, E.	Nairn	42	15	38·4	26·9	32·9	− 5·3	0	64	5	0·33	−0·15	*	*
	Aberdeen	40	12	37·3	25·7	31·7	− 6·0	0	72	5	1·09	+0·39	8	17
	Leith	43	22	40·6	30·7	35·9	− 2·3	0	43	4	0·39	−0·06	*	*
2. ENGLAND, N.E.	Alnwick Castle	40	25	37·3	31·1	34·3	− 3·9	0	54	4	0·67	−0·03	*	*
	Durham	41	12	36·9	29·0	33·1	− 4·8	0	62	4	0·37	−0·30	14	29
	Shields	42	19	39·3	29·1	34·4	− 4·8	0	53	3	0 36	−0·21	*	*
	Scarborough ℛ	41	27	38·3	32·5	35·5	− 2·7	0	46	4	0·76	+0·15	*	*
	York	42	19	39·4	29·9	34·8	− 3·5	0	50	4	0·47	−0·04	13	26
	Spurn Head	40	25	38·7	30·6	34·8	− 3·6	0	50	5	1·06	?	*	*
3. ENGLAND, E.	Hillington ℛ	40	17	36·6	27·5	32·2	− 5·8	0	69	6	1·40	+0·85	8	16
	Yarmouth	40	21	38·0	29·7	34·0	− 5·1	0	56	5	1·36	+0·74	*	*
	Geldeston	41	17	37·9	27·5	32·9	− 6·2	0	64	4	1·50	+1·01	8	15
	Cambridge	42	20	39·0	27·4	33·4	− 5·1	0	60	4	1·39	+0·96	11	21
	Rothamsted	42	22	38·3	29·1	33·9	− 4·2	0	57	5	1·70	+1·11	*	*
	Ingatestone	43	18	40·6	27·5	34·3	− 4·5	0	54	5	1·49	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	42	18	39·0	29·9	34·6	− 4·6	0	52	4	0·61	+0·09	14	27
	Loughborough	43	17	40·7	29·3	35·2	− 2·8	0	48	5	1·01	+0·49	*	*
	Leicester	47	19	39·3	30·0	34·8	− 2·9	0	50	5	1·14	+0·63	12	24
	Cheadle ℛ	41	21	37·6	28·9	33·4	− 4·5	0	60	5	0·96	+0·24	*	*
	Churchstoke ℛ	44	16	41·7	30·5	36·3	− 2·2	0	40	6	1·30	+0·60	19	37
	Hereford ℛ	49	17	43·0	29·4	36·5	− 2·2	3	47	5	1·29	+0·74	*	*
	Cirencester	44	22	40·4	29·0	34·9	− 4·0	0	50	4	1·84	+1·15	17	32
	Oxford	44	23	40·1	30·7	35·6	− 3·6	0	45	4	1·72	+1·22	15	28
5. ENGLAND, S.	London†	46	19	41·7	28·9	35·6	− 3·7	0	45	5	2·55	+2·05	8	15
	Strathfield Turgiss ℛ	44	20	40·9	29·0	35·2	− 3·9	0	48	3	1·59	+1·07	*	*
	Dungeness	46	21	45·1	30·4	38·1	− 3·4	9	45	7	1·78	+1·08	*	*
	Hastings (St. Leonard's)	47	21	42·2	29·6	36·1	− 5·1	1	45	6	1·89	+1·21	16	30
	Southampton	43	24	38·9	30·1	34·7	− 4·7	0	51	7	3·56	+2·84	18	33
	Hurst Castle	47	25	45·6	31·9	39·0	− 2·6	10	40	7	2·19	+1·55	*	*
	Stowell ℛ	46	20	42·9	30·2	36·8	− 3·2	3	44	7	3·12	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡												*	*
	Glasgow	40	23	37·1	30·2	33·8	− 5·1	0	57	5	1·38	+0·40	3	6
	Ardrossan	46	23	43·0	33·3	38·3	− 0·8	3	32	5	0·73	−0·21	*	*
	Douglas (Isle of Man)	48	22	43·9	34·7	39·5	− 1·7	5	28	5	2·70	+1·66	14	28
7. ENGLAND, N.W.	Newton Reigny (Penrith)	40	11	37·7	29·4	33·7	− 3·9	0	58	7	0·78	−0·02	13	27
	Barrow-in-Furness	45	23	42·3	33·4	38·0	− 3·0	1	31	6	1·33	+0·53	*	*
	Stonyhurst	41	18	38·2	30·7	34·6	− 4·3	0	52	7	1·32	+0·25	13	26
	Blackpool ℛ	44	15	41·8	31·0	36·6	− 4·6	0	38	6	1·02	+0·28	13	26
	Manchester	42	16	38·1	30·3	34·4	− 5·1	0	53	7	0·83	0·00	*	*
	Liverpool Obsy (Bidston)	46	21	41·9	32·6	37·4	− 3·2	0	32	6	0·48	−0·11	*	*
	Llandudno ℛ												*	*
	Holyhead	48	32	45·4	38·7	42·2	− 1·5	15	9	5	1·66	+0·81	*	*
8. ENGLAND, S.W.	Llandovery	48	11	43·7	29·3	36·8	− 3·6	5	48	7	1·74	+0·51	*	*
	Pembroke	49	30	46·9	39·3	43·3	+ 0·1	20	8	6	1·84	+0·93	23	43
	Arlington (N. Devon)	47	20	44·6	30·3	37·7	− 2·9	7	45	7	2·11	+0·80	*	*
	Cullompton ℛ	48	13	44·7	26·8	35·9	− 5·3	8	56	7	1·86	+1·06	12	22
	Falmouth	50	28	46·2	36·7	41·6	− 2·6	12	23	7	3·31	+2·06	21	38
	Plymouth	50	22	46·6	29·5	38·4	− 4·5	13	49	7	2·59	+1·74	14	25
	Prawle Point	50	27	48·1	33·0	40·9	− 1·8	17	38	7	1·26	?	*	*
9. IRELAND, N.	Malin Head	45	31	42·7	35·1	39·1	− 1·5	2	26	7	1·62	?	*	*
	Londonderry	44	24	41·0	31·0	36·2	− 4·5	0	41	7	1·42	+0·52	*	*
	Mullaghmore	47	23	43·6	34·6	39·3	− 2·8	4	28	7	1·46	+0·54	*	*
	Belmullet	48	32	44·6	37·7	41·3	− 2·9	7	18	7	1·59	?	*	*
	Markree Castle	44	10	40·3	30·1	35·4	− 5·8	0	46	7	1·74	+0·96	9	18
	Brookeborough	44	10	40·1	28·8	34·7	− 5·4	0	51	5	1·67	?	*	*
	Armagh	45	19	39·5	29·1	34·5	− 5·7	0	53	5	1·28	+0·63	7	14
	Donaghadee	45	24	41·6	30·6	36·3	− 4·9	0	40	6	1·16	+0·51	*	*
	Edgeworthstown	46	15	40·1	26·7	33·7	− 6·1	0	58	3	1·42	+0·72	*	*
10. IRELAND, S.	Dublin	49	22	42·8	31·7	37·5	− 3·7	2	38	5	0·38	−0·16	12	24
	Parsonstown	48	13	42·6	27·1	35·2	− 4·9	2	55	4	1·10	+0·42	15	29
	Kilkenny	51	15	44·0	26·0	35·4	− 4·6	6	60	3	0·83	+0·00	*	*
	Waterford	48	17	42·2	28·1	35·4	− 6·8	1	51	5	1·18	+0·21	*	*
	Roche's Point	50	26	46·3	33·0	39·9	− 3·3	12	36	7	1·55	+0·43	*	*
	Valencia	52	27	48·4	35·9	42·4	− 3·2	28	17	7	1·76	+0·39	13	25
	Killarney	51	17	46·0	31·4	39·0	− 4·4	11	42	7	2·54	?	*	*
	Foynes	50	34	45·7	36·3	41·2	− 0·5	10	24	7	1·79	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	35	49·0	40·9	45·1	− 1·8	26	3	7	2·26	+1·34	*	*
	Jersey (Noirmont)	50	32	47·9	37·9	43·1	− 0·1	25	11	7	1·66	+0·85	17	30

Stations marked ℛ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.

‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.

§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 116, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY J. D. POTTER, 31, POULTRY, AND 11, KING STREET, TOWER HILL, AND E. STANFORD, 55, CHARING CROSS.

VOL. III. No. 53.] *New Series.* WEEK ENDING MONDAY, 3RD JANUARY, 1887. [*Price 4d.* [*Annual subscription post paid, £1 1s. 2d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the last page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years observations (1861-80). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the eight years, 1878-85. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty years 1866-85, but the *Mean numbers of Rainy Days* are those for the eight years 1878-85, only. BRIGHT SUNSHINE.—*The Mean* values employed are those for the corresponding periods in the five years 1881-85.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. of this Series.

Temperature of the Air.

	DISTRICTS. (See p. 212.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Below 42°	Since December 29, 1885. Above 42°.	Difference from Mean.	Below 42°.	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	46	17	41·4	32·4	37·1	2 below.	0	34	1750	−145	937	+119
	1. SCOTLAND, EAST	45	19	40·4	29·7	35·2	3 below.	0	48	2339	− 64	1050	+137
	2. ENGLAND, N.E.	43	22	36·8	29·5	33·3	5 below.	0	61	2537	− 53	984	+200
	3. ENGLAND, EAST	43	8	36·5	25·2	31·1	7 below.	0	76	3045	+ 69	1072	+255
	4. MIDLAND COUNTIES	48	10	37·3	25·3	31·5	7 below.	0	74	2964	+ 21	1029	+189
	5. ENGLAND, SOUTH	46	9	38·4	26·7	32·8	7 below.	0	64	3348	+ 84	824	+217
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	47	26	42·5	33·8	38·3	1 below.	1	30	2343	−215	791	+132
	7. ENGLAND, N.W.	46	19	38·0	29·8	34·1	6 below.	0	55	2646	− 85	826	+214
	8. ENGLAND, S.W.	49	16	42·4	31·3	37·0	5 below.	1	39	3092	−118	662	+302
	9. IRELAND, NORTH	47	25	42·9	34·6	38·9	2 below.	3	28	2512	−162	702	+118
	10. IRELAND, SOUTH †	51	29	45·6	36·8	41·3	1 below.	10	21	2962	−125	570	+149
	— CHANNEL ISLANDS	50	30	45·0	38·5	41·9	3 below.	8	15	3588	+ 14	234	+103 *

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 212.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	Since December 29, 1885. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Percentage of possible Duration.	Since December 29, 1885. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.				Ins.	Ins.						
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	13	4 more.	263	+25	39·2	+ 1·3	7	16	1309	+ 85	29	+ 2
	1. SCOTLAND, EAST	3	2	4 less.	204	+ 7	25·4	− 2·1	9	20	1387	− 22	31	− 1
	2. ENGLAND, N.E.	4	2	3 less.	199	+ 6	29·2	+ 0·2	12	23	1194	− 80	27	− 2
	3. ENGLAND, EAST	4	4	1 less.	193	− 6	26·2	− 2·0	16	31	1531	− 21	34	− 1
	4. MIDLAND COUNTIES	4	6	0 (average).	202	+11	33·2	+ 2·8	10	19	1265	−126	28	− 3
	5. ENGLAND, SOUTH	3		3 more.	195	+11	33·2	+ 3·9	15	27	1519	+ 29	34	0
Principal Grazing, &c. Districts.	6. SCOTLAND, WEST	5	11	3 less.	218	+ 7	47·0	+ 4·8	6	12	1232	−104	28	− 2
	7. ENGLAND, N.W.	4	6	2 less.	214	+15	43·4	+ 6·2	5	9	1254	− 76	28	− 2
	8. ENGLAND, S.W.	3	10	1 less.	218	+ 6	46·8	+ 0·9	15	26	1464	−146	33	− 3
	9. IRELAND, NORTH	6	8	0 (average).	234	− 2	42·8	+ 4·0	8	15	1097	−177	25	− 3
	10. IRELAND, SOUTH †	5	10	1 more.	227	+ 8	46·2	+ 5·1	5	10	1280	−182	29	− 4
	— CHANNEL ISLANDS	5	10	2 more.	251	+21	38·6	+ 2·9	21	37	1829	− 72	41	− 2

General Remarks.

Weather continued dull and unsettled in the western and north-western parts of the Kingdom, with occasional falls of rain or sleet, but in all the more southern and eastern districts the conditions during the greater part of the period, although frequently dull and foggy, were somewhat fairer than of late. Towards the end of the period, however, the disturbed weather extended to all our coasts, and heavy rain, sleet, or snow was experienced generally.

Temperature has been below the mean in all districts; in Scotland, Ireland, and the "Channel Islands", the deficit has been from 1° to 3°, but over England it has been as much as from 5° to 7°. The highest of the maxima which were recorded on irregular dates, ranged from 43° in "England, N.E." and "England, E.", to 51° in "Ireland, S." The lowest of the minima, which were registered in most places either on January 1st or 2nd, varied from 8° in "England, E." (at Rothamsted), 9° in "England, S." (at Strathfield Turgiss), and 10° in the "Midland Counties" (at Cirencester), to 29° in "Ireland, S." and 30° in the "Channel Islands". The lowest averages for the week at any individual stations were 27°·5 at Strathfield Turgiss, 28°·9 at Rothamsted and Cambridge, and 29°·3 at Oxford.

Rainfall has exceeded the mean value in "Scotland, N.", "England, S.", "Ireland, S.", and the "Channel Islands", but in most other districts it has been rather less.

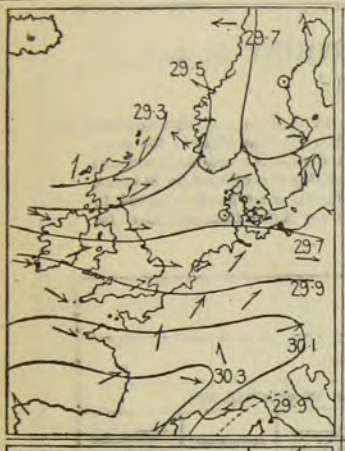
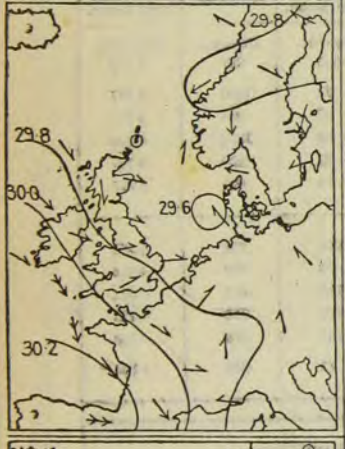
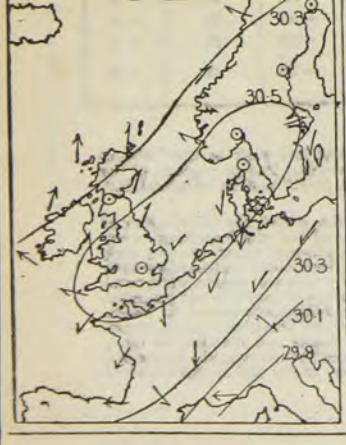
Bright sunshine has been more prevalent than it was last week in the "Wheat-producing" districts, but less so in the "Grazing" districts. The percentages of the possible amount of duration ranged from 9 in "England, N.W." to 31 in "England, E.", and 37 in the "Channel Islands."

Depressions observed.—During the greater part of the period the distribution of barometric pressure over our Islands was anticyclonic, and the only depressions in our immediate neighbourhood skirted our extreme west and north-west coasts. As the week drew towards its close, however, the high pressure area had moved south-eastwards to the continent and a deep depression appeared over our north-west coasts, while some small shallow disturbances travelled over England. Strong Westerly winds prevailed over our Islands at the beginning of the week, but they subsequently veered to North-West, North, or North-East, and fell light. As the anticyclone moved slowly eastwards, however, they backed to the Southward on our western coasts and increased in force, while at most of the English stations calms and variable airs became general. At the end of the period the Southerly winds had extended to all our coasts and in the west and south-west they had increased to the force of a gale.

* The corresponding value in last week's Report should be "93".
† The values in this district are liable to alteration owing to omissions in the Return from Waterford.

A 50025. 350.—1/87. Wt. 44. E. & S.

II.—SUMMARY OF WEATHER OVER WESTERN EUROPE.

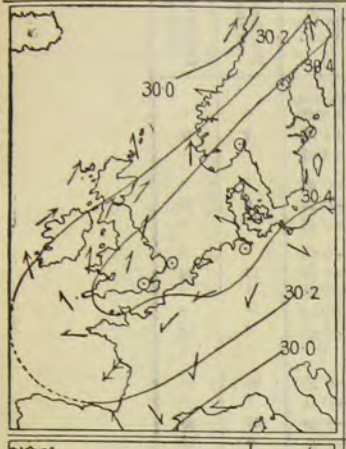
Synoptic Charts. Pressure and Wind. 8 a.m.	Synoptic Charts. Pressure and Wind. 6 p.m.	Weather During the 24 hours succeeding 8 a.m. on the dates given.	Synoptic Charts. Temperature and Weather at 8 a.m.
		**Tuesday, December 28.** *Weather* fine at all our more eastern stations, but cloudy or overcast elsewhere, with hail or sleet showers on our extreme north-west coasts, and snow in the south of Sweden. Cold showers falling later in most parts of the Kingdom. *Temperature* fallen in Sweden, Denmark, and France, but risen elsewhere ; readings over our Islands ranging from 49° at Scilly and Jersey to 32° at Aberdeen. *Wind* chiefly Westerly over our Islands and France, but South-Easterly or Easterly in the west of Norway ; strong in force at some of our western stations. Subsequently increasing to gale in Ireland and the west of Scotland. *Sea* rather rough on our west coasts, but moderate to smooth elsewhere. *Barometer* falling at all but the French and German stations. Pressure highest in Spain, but relatively high over the Gulf of Bothnia, with a large depression to the northward and north-westward of Scotland. Depression subsequently extending south-eastwards, but barometer rising on our extreme western coasts.	
		**Wednesday, December 29.** *Weather* fair over the greater part of our Islands, but dull elsewhere, with showers on our south-west coasts and rain at several of the French stations. Showers falling later in many parts of the United Kingdom. *Temperature* risen a little in Ireland, the west of Scotland, and the south of France, but fallen elsewhere ; readings over our Islands now ranging from 49° at Scilly and 47° at Valencia to 27° at Wick. Frost occurring generally at night. *Wind* Westerly or North-Westerly in our Islands and France, with gales in the Bay of Biscay and at the mouth of the Channel ; light South-Westerly in Germany, moderate Easterly or North-Easterly in Scandinavia. *Sea* rough on exposed parts of our western and southern coasts. *Barometer* falling a little in Germany and France, but rising elsewhere. Pressure highest over Spain and the Bay of Biscay, with a depression over the North Sea. Depression subsequently moving south-eastwards, and partially filling up.	
		Thursday, December 30. *Weather* dull and unsettled over Germany and the south of France, but fine elsewhere, with, however, fog at some of the English and Irish stations. *Temperature* fallen generally ; readings over our Islands ranging from 48° at Scilly and 45° at Roche's Point to 28° at Aberdeen, Loughborough, and Cambridge. Hard frost occuring in most places at night. *Wind* light Westerly on our northern coasts, and Northerly or North-Easterly at our southern and many of the French stations, but strong from North-West in the south of France. *Sea* rather rough in the Bay of Biscay, but moderate to smooth elsewhere. *Barometer* rising generally. Depression of previous two days passing away over Central Europe, and anticyclone extending over our Islands from the westward. Rise continuing all day.	
		**Friday, December 31.** *Weather* dull in Ireland and the west of Scotland, and foggy over England, but fair or fine elsewhere. Rain falling later at several of the Irish and Scotch stations. *Temperature* risen a little on our western and northern coasts, but fallen several degrees elsewhere ; readings over our Islands ranging from 47° at Valencia to 20° at Loughborough. Hard frost occurring over Central England at night. *Wind* moderate to fresh Southerly in Ireland and Scotland, but North-Easterly at our Southern and most of the Continental stations. *Sea* rough at Valencia and rather rough at Stornoway, but moderate to smooth elsewhere. *Barometer* rising at all but the Irish and Scotch stations. Anticyclonic band extending from England to the south of Sweden, with a depression over the Gulf of Genoa, and relatively low readings on our extreme north-west coasts. Fall of barometer taking place over the whole of our Islands later.	

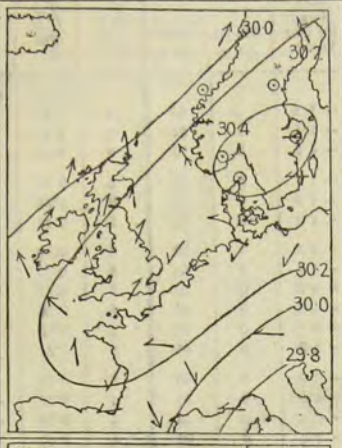
SUMMARY OF WEATHER OVER WESTERN EUROPE—*continued.*

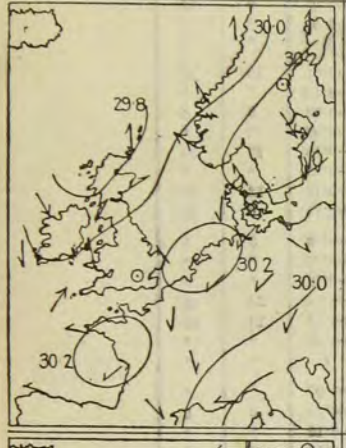
Synoptic Charts.

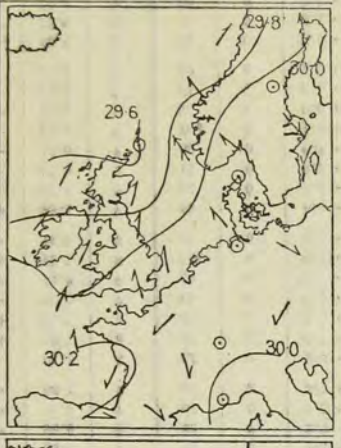
PRESSURE AND WIND.

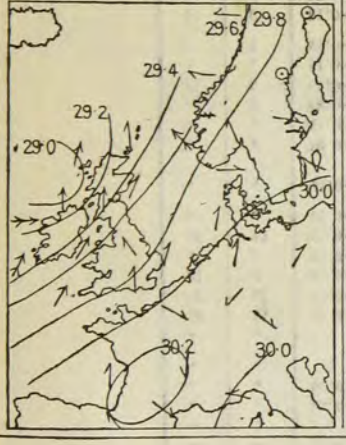
8 a.m. | **6 p.m.**

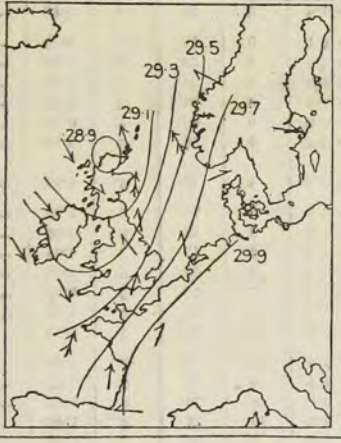












Weather

During the 24 hours succeeding 8 a.m. on the dates given.

Saturday, January 1.

Weather dull on our extreme western and northern coasts, and foggy over England, but fair or fine elsewhere. Rain falling later in some parts of Ireland and Scotland.

Temperature risen at most of our western and northern stations, but fallen elsewhere; readings over our Islands now ranging from 48° at Valencia and 47° at Belmullet to 14° at Cambridge. Hard frost again occurring over England at night.

Wind Southerly or South-Westerly in the west and north of our Islands, but calm over central England and light North-Easterly in Germany and France.

Sea rough at Stornoway and Valencia, but moderate to smooth elsewhere.

Barometer falling generally. Anticyclone noticed on previous day moving eastwards over the North Sea, and depressions beginning to skirt our extreme western coasts in a north-north-easterly direction. Fall continuing all day.

Sunday, January 2.

Weather fine in the south of our Islands and the west and north of France, but overcast in most other localities, with rain on our extreme western and northern coasts. Rain or sleet falling later over the greater part of England.

Temperature risen slightly at the English stations, but fallen elsewhere; readings over our Islands ranging from 45° at Roche's Point to 17° in London, 15° at Oxford, and 14° at Cambridge. Brisk rise taking place over England later.

Wind Northerly in the west of Ireland, but South-Westerly or Southerly on other parts of our western and northern coasts. North-Easterly or Northerly breezes still prevailing in France. Southerly winds setting-in later over the south-east of England.

Sea rather rough at Scilly, but moderate to smooth elsewhere.

Barometer falling generally. Anticyclonic system lying over Sweden, the Netherlands, and the west of France, with shallow depressions over the Gulf of Genoa and the north-west of Scotland. Fall continuing all day, and anticyclone to the eastward of us gradually dispersing.

Monday, January 3.

Weather fine in the south of France, but dull elsewhere, with rain in many parts of the United Kingdom. Some improvement taking place in west later.

Temperature fallen a little in Germany, but risen elsewhere; readings over our Islands ranging from 46° at Valencia to 29° at York.

Wind variable in Sweden, Germany, and the east of France, and South-Easterly in Norway, but Southerly or South-Westerly elsewhere; strong to a gale in force in Ireland. Gale subsequently spreading eastwards over the whole Kingdom, but wind veering to North-West in Ireland.

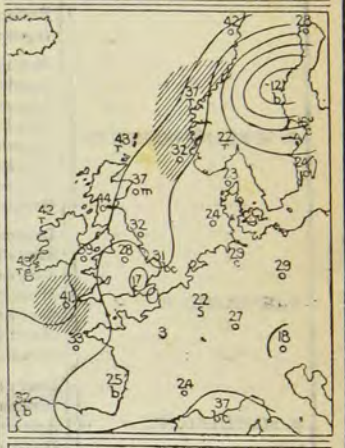
Sea rough, or rather so, on all our western and northern coasts.

Barometer falling at all but the southern French stations. Anticyclonic system lying over France and Germany, with a deep depression off our extreme north-west coasts. Depression subsequently moving north-eastwards, but subsidiary disturbances appearing in west.

Synoptic Charts.

TEMPERATURE AND WEATHER

at 8 a.m.



Explanation of Charts.—In the two left-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force being indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the right-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

III.—DATA from which the SUMMARY on page 209 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the week. Of Highest each day.	Of Lowest each day.	For whole of the day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Percentage of possible duration.
		°	°	°	°	°					Inches.	Inches.		
0. SCOTLAND, N.	Sumburgh Head	45	32	42·7	34·9	38·9	− 1·1	2	26	6	0·96	+0·05	*	*
	Stornoway	46	27	42·4	33·4	38·1	− 1·1	1	32	7	2·44	+1·23	7	16
	Wick	42	17	39·1	28·9	34·2	− 4·9	0	55	6	0·50	−0·09	*	*
1. SCOTLAND, E.	Nairn	45	19	41·1	30·7	36·1	− 1·7	0	41	4	0·11	−0·37	*	*
	Aberdeen	41	21	39·1	27·4	33·5	− 4·0	0	60	3	0·30	−0·35	9	20
	Leith	42	25	40·9	30·9	36·1	− 1·9	0	41	2	0·11	−0·44	*	*
2. ENGLAND, N.E.	Alnwick Castle	38	24	36·9	30·1	33·6	− 4·4	0	59	2	0·06	−0·55	*	*
	Durham	40	23	36·1	27·9	32·2	− 5·5	0	69	3	0·12	−0·48	16	32
	Shields	41	25	37·9	29·0	33·6	− 5·4	0	59	3	0 12	−0·38	*	*
	Scarborough ℳ	39	27	36·1	31·4	33·8	− 4·3	0	57	4	0·36	−0·19	*	*
	York	43	22	36·7	27·1	32·1	− 6·1	0	69	4	0·38	−0·12	7	14
	Spurn Head	41	27	37·1	31·3	34·3	− 4·2	0	54	5	0·31	?	*	*
3. ENGLAND, E.	Hillington ℳ	39	15	35·3	25·4	30·6	− 6·9	0	80	3	0·39	−0·12	19	37
	Yarmouth	39	28	37·4	29·7	33·7	− 5·0	0	58	4	0·17	−0·41	*	*
	Geldeston	43	21	38·7	27·3	33·2	− 5·3	0	62	4	0·16	−0·29	21	39
	Cambridge	42	12	35·6	21·6	28·9	− 9·2	0	92	4	0·45	+0·05	9	17
	Rothamsted	41	8	35·5	21·8	28·9	− 8·9	0	92	3	0·95	+0·35	*	*
	Ingatestone	40	18	36·7	25·3	31·3	− 7·2	0	75	3	0·29	?	*	*
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)§	41	20	36·6	27·9	32·4	− 6·5	0	67	4	0·50	+0·01	10	19
	Loughborough	43	17	36·0	24·9	30·7	− 7·0	0	79	4	0·66	+0·16	*	*
	Leicester	41	16	35·4	26·0	30·9	− 6·6	0	78	4	0·46	−0·03	3	6
	Cheadle ℳ	41	18	?37·3	27·1	?32·4	−?5·1	0	?67	4	0·66	−0·03	*	*
	Churchstoke ℳ	45	15	39·3	27·1	33·4	− 4·9	0	60	4	0·51	−0·18	17	33
	Hereford ℳ	46	19	37·6	25·7	31·9	− 6·8	0	71	3	0·23	−0·35	*	*
	Cirencester	48	10	41·3	20·4	31·3	− 7·2	0	75	4	0·55	−0·17	12	22
	Oxford	42	14	35·0	23·1	29·3	− 9·9	0	89	4	1·28	+0·78	9	17
5. ENGLAND, S.	London†	43	15	37·4	25·1	31·5	− 7·7	0	74	2	0·44	−0·06	3	5
	Strathfield Turgiss ℳ	41	9	35·4	19·0	27·5	−11·4	0	102	2	1·24	+0·79	*	*
	Dungeness	45	27	41·7	30·4	36·3	− 4·5	0	40	4	0·57	−0·11	*	*
	Hastings (St. Leonard's)	44	27	39·9	30·5	35·4	− 5·0	0	46	4	0·63	−0·04	24	44
	Southampton	46	20	37·0	28·7	33·0	− 6·2	0	63	2	1·12	+0·37	18	33
	Hurst Castle	45	23	41·1	28·7	35·2	− 6·0	0	48	3	1·01	+0·33	*	*
	Stowell ℳ	43	14	36·6	24·4	30·7	− 9·3	0	79	3	1·20	?	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)‡	44	30	42·8	34·3	38·7	− 1·2	2	29	6	1·99	−0·06	*	*
	Glasgow	42	27	39·6	32·9	36·4	− 2·3	0	39	4	0·55	−0·45	3	6
	Ardrossan	47	26	43·4	33·4	38·6	− 0·6	4	32	4	0·86	−0·12	*	*
	Douglas (Isle of Man)	46	28	44·2	34·4	39·5	− 1·4	6	30	5	0·88	−0·18	9	18
7. ENGLAND, N.W.	Newton Reigny (Penrith)	41	19	35·9	25·7	31·0	− 6·5	0	77	4	0·39	−0·43	3	6
	Barrow-in-Furness	43	27	38·3	30·4	34·5	− 6·1	0	53	4	0·69	−0·15	*	*
	Stonyhurst	43	23	36·7	28·5	32·8	− 5·9	0	64	4	0·54	−0·48	5	10
	Blackpool ℳ	44	21	37·4	28·0	32·9	− 7·8	0	64	3	0·43	−0·29	6	12
	Manchester	43	21	36·5	28·4	32·6	− 6·6	0	66	4	0·68	−0·12	*	*
	Liverpool Obsy (Bidston)	44	24	38·0	29·7	34·0	− 6·4	0	56	3	0·33	−0·23	*	*
	Llandudno ℳ													
	Holyhead	46	32	43·3	37·6	40·6	− 2·6	4	17	3	0·99	+0·17	*	*
8. ENGLAND, S.W.	Llandovery	45	16	38·9	23·1	31·3	− 8·9	0	75	3	1·05	−0·19	*	*
	Pembroke	47	34	45·3	37·9	41·8	− 1·2	9	18	3	0·75	−0·15	14	26
	Arlington (N. Devon)	46	24	41·1	29·6	35·6	− 4·8	0	45	3	0·64	−0·55	*	*
	Cullompton ℳ	48	18	38·8	25·6	32·3	− 8·7	0	68	3	0·98	+0·18	9	16
	Falmouth	49	33	44·5	36·5	40·7	− 3·5	7	22	5	1·02	−0·23	17	30
	Plymouth	48	28	43·1	31·8	37·7	− 5·1	3	38	3	1·15	+0·28	18	32
	Prawle Point	48	30	44·9	34·4	39·9	− 2·7	8	30	3	1·25	?	*	*
9. IRELAND, N.	Malin Head	45	35	43·1	36·7	40·0	− 0·4	3	20	7	0·59	?	*	*
	Londonderry	46	28	43·5	33·3	38·6	− 2·4	4	33	6	0·62	−0·28	*	*
	Mullaghmore	46	34	44·7	38·3	41·6	− 0·6	8	16	6	0·81	−0·09	*	*
	Belmullet	47	34	45·6	37·9	41·9	− 2·3	10	18	6	1·42	?	*	*
	Markree Castle	45	33	42·6	35·0	39·0	− 2·7	2	26	7	0·95	+0·17	4	8
	Brookeborough	44	28	40·8	32·5	36·8	− 3·3	0	36	5	0·81	?	*	*
	Armagh	47	25	42·1	31·4	37·0	− 3·0	0	39	5	0·48	−0·17	11	22
	Donaghadee	45	30	42·6	33·4	38·2	− 2·9	2	32	4	0·59	−0·08	*	*
	Edgeworthstown	44	30	41·3	32·6	37·1	− 2·6	0	34	4	0·50	−0·19	*	*
10. IRELAND, S.	Dublin	48	29	42·9	33·4	38·3	− 2·9	3	32	3	0·15	−0·37	8	15
	Parsonstown	45	33	43·0	35·4	39·3	− 0·7	3	25	5	0·68	−0·01	2	4
	Kilkenny	50	25	45·6	32·1	39·1	− 0·8	10	39	4	0·86	+0·09	*	*
	Waterford												*	*
	Roche's Point	50	38	47·1	40·4	43·9	+ 0·9	20	4	4	1·13	−0·04	*	*
	Valencia	51	38	48·1	40·7	44·6	− 0·8	24	4	7	1·69	+0·27	6	11
	Killarney	50	31	47·0	37·8	42·6	− 0·7	22	12	6	1·76	?	*	*
	Foynes	48	34	45·4	37·5	41·6	− 0·1	10	19	5	1·03	?	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	50	38	47·6	41·3	44·6	− 2·1	21	2	5	1·25	+0·34	*	*
	Jersey (Noirmont)	49	30	42·4	35·7	39·2	− 3·8	1	23	4	0·77	−0·03	21	37

Stations marked ℳ are in connection with the Royal Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.
† For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street.
‡ The rainfall at Laudale being so much greater than that at the other stations in "Scotland, W.", and the fall being very local, the weekly amounts are not used in calculating the "Difference from the mean for the Week" in that district.
§ The Bright Sunshine values entered to Bawtry are recorded at Worksop.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX I.] *New Series.* FIRST QUARTER—JANUARY TO MARCH. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FIRST QUARTER OF THE TWENTY-ONE YEARS, 1866 TO 1886.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	1866	—	14·8	—	11·3	—	5·8	—	7·4	—	7·1	—	11·4	—	8·6	—	15·4	—	13·4	—	16·9	—	13·7	—	12·0	—	14·5	—	—	—	11·5
	1867	—	10·7	—	9·5	—	5·4	—	5·7	—	8·1	—	8·8	—	7·5	—	9·9	—	11·1	—	15·2	—	11·8	—	10·7	—	11·7	—	—	—	9·6
	1868	—	19·1	—	11·7	—	4·9	—	5·4	—	6·7	—	7·5	—	7·2	—	17·6	—	13·3	—	11·9	—	13·0	—	10·5	—	13·3	—	—	—	10·3
	1869	—	11·8	—	8·9	—	6·2	—	6·2	—	7·7	—	9·0	—	7·6	—	11·4	—	12·2	—	14·0	—	12·1	—	12·1	—	12·4	—	—	—	10·0
	1870	—	6·4	—	6·7	—	4·8	—	3·9	—	5·1	—	6·0	—	5·3	—	8·8	—	9·0	—	10·7	—	8·6	—	9·7	—	9·4	—	—	—	7·4
	1871	—	9·4	—	6·9	—	3·8	—	3·9	—	4·8	—	6·1	—	5·1	—	11·7	—	8·7	—	10·0	—	10·7	—	9·4	—	10·1	—	—	—	7·6
	1872	—	8·2	—	11·2	—	7·8	—	6·1	—	9·8	—	10·1	—	9·0	—	15·2	—	14·0	—	19·5	—	12·7	—	13·1	—	14·9	—	—	—	12·0
	1873	—	7·9	—	7·2	—	5·3	—	5·4	—	7·1	—	8·4	—	6·7	—	10·0	—	9·6	—	14·1	—	8·8	—	11·9	—	10·9	—	—	—	8·8
	1874	—	11·5	—	6·5	—	3·5	—	3·1	—	5·7	—	4·4	—	4·6	—	8·6	—	11·0	—	12·5	—	8·4	—	7·7	—	9·6	—	—	—	7·1
	1875	—	8·4	—	7·0	—	3·9	—	3·7	—	5·8	—	6·7	—	5·4	—	9·8	—	8·7	—	12·6	—	7·1	—	10·2	—	9·7	—	—	—	7·6
	Means for 10 years, 1866-75	—	10·8	—	8·7	—	5·1	—	5·1	—	6·8	—	7·8	—	6·7	—	11·8	—	11·1	—	13·7	—	10·7	—	10·7	—	11·6	—	—	—	9·2
	1876	—	13·4	—	9·5	—	6·3	—	6·7	—	8·2	—	7·5	—	7·6	—	12·1	—	12·0	—	10·9	—	10·0	—	10·0	—	11·0	—	—	—	9·3
	1877	—	11·9	—	9·8	—	7·1	—	7·6	—	8·3	—	10·7	—	8·7	—	14·2	—	15·4	—	14·2	—	13·4	—	11·4	—	13·7	—	—	—	11·2
	1878	67	9·3	40	4·3	45	4·8	52	4·5	43	3·9	42	5·1	44	4·5	53	11·0	51	7·2	41	6·1	60	8·3	52	7·8	51	8·1	56	6·1	48	6·3
	1879	54	5·5	46	6·9	55	5·1	54	6·2	48	6·1	49	8·2	50	6·5	47	8·5	43	6·7	54	11·2	60	6·7	55	11·2	52	8·9	63	11·7	51	7·7
	1880	49	7·4	41	5·5	34	3·3	38	3·4	35	4·3	38	4·7	37	4·2	49	10·3	40	6·2	47	6·9	49	7·5	50	9·8	47	8·1	50	6·0	42	6·2
	1881	60	9·2	46	7·4	51	6·3	47	5·8	42	6·4	39	6·7	45	6·5	46	9·5	42	8·6	45	9·7	51	7·7	44	8·7	46	8·8	51	9·0	46	7·7
	1882	72	10·3	48	5·2	32	3·1	32	4·3	35	5·6	34	3·6	36	4·4	62	11·9	49	7·8	49	7·1	63	8·3	59	9·7	57	9·0	48	5·8	47	6·7
	1883	65	8·9	52	6·5	53	5·8	51	6·4	49	7·4	49	7·5	51	6·7	56	12·2	51	8·5	55	10·4	63	10·2	57	13·8	57	11·0	63	8·8	54	8·9
	1884	66	12·1	52	6·4	44	6·2	42	3·9	47	6·7	48	6·7	46	6·0	68	17·1	57	11·5	62	12·2	70	12·2	72	15·4	66	13·7	59	9·2	56	9·9
	1885	63	9·1	46	5·4	45	4·4	48	5·3	50	6·1	45	7·3	47	5·7	57	11·9	53	7·7	54	9·1	57	8·4	58	11·8	56	9·8	62	8·2	52	7·8
	Means for 10 years, 1876-85	—	9·7	—	6·7	—	5·2	—	5·4	—	6·3	—	6·8	—	6·1	—	11·9	—	9·2	—	9·8	—	9·3	—	11·0	—	10·2	—	—	—	8·2
	1886	70	9·5	55	5·9	56	6·3	54	4·9	49	6·5	48	6·3	53	6·0	57	11·2	54	9·0	57	10·8	58	10·0	55	11·2	56	10·4	68	8·9	55	8·2
	Means for 21 years, 1866-86	—	10·2	—	7·6	—	5·2	—	5·2	—	6·5	—	7·3	—	6·4	—	11·8	—	10·1	—	11·7	—	10·0	—	10·9	—	10·9	—	—	—	8·7
MEAN TEMPERATURE (in Degrees Fahrenheit).	1866		38°3		38·8		39°1		40°9		40°4		41°9		40°2		40°0		40°6		43°4		39°9		40°3		40°8				40°5
	1867		36·9		37·2		36·8		38·6		38·2		39·2		38·0		37·7		38·6		41·4		38·1		39·9		39·1				38·6
	1868		40·7		41·7		41·1		41·4		41·9		42·0		41·6		42·3		42·4		44·4		42·1		44·3		43·1				42·4
	1869		40·0		40·3		40·6		41·1		41·2		42·0		41·0		42·0		42·1		45·1		42·9		44·6		43·3				42·2
	1870		37·9		37·4		37·1		37·4		38·0		38·2		37·6		38·6		38·7		41·3		39·8		41·6		40·0				38·8
	1871		40·0		39·7		38·8		39·2		40·1		40·3		39·6		40·0		40·0		43·3		41·6		43·4		41·7				40·7
	1872		40·9		40·9		41·3		42·3		42·9		43·7		42·2		42·9		43·3		46·1		42·4		44·5		43·8				43·0
	1873		39·0		38·4		38·5		38·9		39·1		39·9		39·0		39·2		39·7		42·6		39·8		41·0		40·5				39·8
	1874		41·7		41·8		41·3		40·4		41·0		42·0		41·3		42·3		41·8		45·0		42·8		45·2		43·4				42·4
	1875		39·5		39·0		38·8		38·6		39·2		40·2		39·2		39·8		40·2		42·9		41·6		44·6		41·8				40·5
	Means for 10 years, 1866-75		39·5		39·5		39·3		39·9		40·2		40·9		40·0		40·5		40·7		43·6		41·1		42·9		41·8		—		40·9
	1876		38·7		38·3		39·2		39·0		38·9		40·0		39·1		39·5		39·8		42·4		40·1		43·3		41·0		—		40·1
	1877		38·4		38·8		40·4		41·7		41·8		43·1		41·2		40·5		41·8		44·9		41·4		45·2		42·8		—		42·0
	1878		39·4		40·1		40·8		40·6		41·8		41·7		41·0		41·9		42·2		44·2		42·5		45·1		43·2		43·8		42·1
	1879		35·8		34·2		35·9		36·5		36·4		37·8		36·2		36·5		36·8		40·8		38·0		40·5		38·5		42·4		37·4
	1880		40·6		39·8		39·5		39·2		39·9		40·5		39·8		41·3		40·6		43·5		42·2		44·1		42·3		42·4		41·1
	1881		34·4		33·5		34·3		36·1		35·8		38·2		35·6		35·3		36·6		39·9		37·5		39·8		37·8		44·5		36·7
	1882		41·8		42·9		42·8		42·1		42·6		43·5		42·8		43·7		43·5		44·9		44·8		46·0		44·6		44·7		43·7
	1883		38·7		38·8		38·8		39·0		39·2		40·8		39·3		40·2		40·1		42·2		40·9		42·5		41·2		41·8		40·3
	1884		40·7		41·2		41·9		42·4		42·6		43·8		42·4		42·4		42·4		44·5		42·7		44·8		43·4		46·5		42·9
	1885		38·4		38·3		39·2		39·2		39·3		40·7		39·3		39·6		39·7		41·9		40·6		42·2		40·8		43·9		40·1
	Means for 10 years, 1876-85		38·7		38·6		39·3		39·6		39·8		41·0		39·7		40·1		40·4		42·9		41·1		43·4		41·6		—		40·6
	1886		36·5		36·1		36·2		35·6		36·0		37·2		36·2		37·2		36·9		38·4		38·6		40·0		38·2		42·0		37·2
	Means for 21 years, 1866-86		39·0		38·9		39·2		39·5		39·8		40·8		39·6		40·1		40·4		43·0		41·0		43·0		41·5		—		40·6

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-ONE YEARS, 1866 TO 1886.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 4·2 in 1880	Ins. 8·1 in 1878 and 1880	Ins. 6·2 in 1880
	Wettest	9·0 in 1872	14·9 in 1872	12·0 in 1872
Temperature	Coldest	35°6 in 1881	37°8 in 1881	36°7 in 1881
	Warmest	42·8 in 1882	44·6 in 1882	43·7 in 1882

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE FIRST QUARTER, 1886.

YEAR AND MONTHS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.					
	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.
RAINFALL.—NUMBER OF DAYS WITH RAIN.																														
January -	27	27	20	20	19	19	22	22	21	21	21	21	21	21	23	23	21	21	23	23	21	21	18	18	21	21	26	26	21	21
February -	20	47	16	36	15	34	13	35	14	35	13	34	14	35	18	41	17	38	16	39	18	39	18	36	17	38	19	45	16	37
March - -	23	70	19	55	22	56	19	54	14	49	14	48	18	53	16	57	16	54	18	57	19	58	19	55	18	56	23	68	18	55
RAINFALL.—AMOUNTS IN INCHES.																														
January -	4·99	4·99	2·46	2·46	2·83	2·83	2·71	2·71	3·00	3·00	3·32	3·32	2·86	2·86	4·98	4·98	4·20	4·20	4·33	4·33	4·07	4·07	2·84	2·84	4·08	4·08	3·12	3·12	3·47	3·47
February -	2·63	7·62	1·62	4·08	1·14	3·97	0·74	3·45	1·43	4·43	1·32	4·64	1·25	4·11	3·25	8·23	2·25	6·45	2·43	6·76	3·17	7·24	3·63	6·47	2·95	7·03	2·03	5·15	2·10	5·57
March - -	1·84	9·46	1·78	5·86	2·35	6·32	1·44	4·89	2·03	6·46	1·69	6·33	1·86	5·97	2·95	11·18	2·55	9·00	3·99	10·75	2·77	10·01	4·71	11·18	3·39	10·42	3·75	8·90	2·63	8·20
ACCUMULATED HEAT.—DAY DEGREES ABOVE 42° F.																														
January -	5	5	11	11	12	12	12	12	18	18	30	30	17	17	23	23	19	19	34	34	24	24	39	39	28	28	61	61	23	23
February -	4	9	10	21	3	15	0	12	1	19	8	38	4	21	7	30	5	24	13	47	22	46	42	81	18	46	39	100	11	34
March - -	35	44	54	75	58	73	84	96	89	108	69	107	71	92	41	71	65	89	74	121	65	111	81	162	65	111	85	185	68	102
ACCUMULATED HEAT.—DAY DEGREES BELOW 42° F.																														
January -	196	196	218	218	204	204	226	226	214	214	173	173	207	207	169	169	167	167	147	147	137	137	128	138	152	152	55	55	180	180
February -	151	347	181	399	192	396	225	451	192	406	168	341	192	399	144	313	155	322	143	290	126	263	96	234	133	285	49	104	162	342
March - -	198	545	233	632	225	621	233	684	244	650	214	555	230	629	196	509	235	557	172	462	165	428	128	362	179	464	94	198	205	547
BRIGHT SUNSHINE.—NUMBER OF HOURS.																														
January -	18	18	41	41	31	31	54	54	46	46	50	50	44	44	35	35	33	33	49	49	25	25	39	39	36	36	59	59	40	40
February -	69	87	72	113	42	73	59	113	42	88	45	95	52	96	29	64	38	71	52	101	53	78	60	99	46	82	74	133	49	89
March - -	118	205	80	193	94	167	85	198	85	173	85	180	86	182	86	150	100	171	85	186	65	143	104	203	88	170	129	262	87	176
BRIGHT SUNSHINE.—PERCENTAGE OF POSSIBLE DURATION.																														
January -	10	10	21	24	15	14	24	24	21	19	22	20	21	20	17	18	15	13	21	17	11	11	18	15	16	15	20	20	19	18
February -	28	15	30	25	17	17	23	26	17	20	17	22	21	22	12	16	15	16	20	22	20	15	23	20	18	18	28	27	20	20
March - -	30	25	20	24	24	19	21	23	21	20	22	20	22	21	22	17	25	19	21	21	16	17	26	23	22	19	32	28	22	20

1886.

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summary of the Weekly Weather Report, 1884. The whole of the values for 1878-86, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *January* are those for the first four weeks in the year; those for *February* are for the fifth to the eighth weeks; those for *March* are for the ninth to the thirteenth weeks.

The figures given in the columns headed "Since Dec. 29" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0 are not included.

In the "Means for the Grazing, &c. Districts" the values for the "Channel Islands" are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX I.] *New Series.* SECOND QUARTER—APRIL TO JUNE. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE SECOND QUARTER OF THE TWENTY-ONE YEARS, 1866 TO 1886.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	1866	—	6·2	—	4·8	—	5·2	—	6·0	—	6·3	—	6·7	—	5·8	—	5·1	—	6·3	—	6·5	—	6·7	—	8·2	—	6·6	—	—	—	6·2
	1867	—	10·6	—	8·0	—	6·8	—	6·2	—	6·7	—	5·8	—	6·7	—	10·5	—	8·3	—	10·0	—	10·0	—	9·3	—	9·6	—	—	—	8·2
	1868	—	10·9	—	6·1	—	3·7	—	3·2	—	3·3	—	4·1	—	4·1	—	7·7	—	4·4	—	5·9	—	6·6	—	6·3	—	6·2	—	—	—	5·2
	1869	—	6·7	—	5·3	—	7·5	—	5·0	—	7·5	—	6·6	—	6·4	—	4·8	—	7·6	—	8·2	—	7·7	—	7·8	—	7·2	—	—	—	6·8
	1870	—	9·5	—	4·1	—	4·3	—	2·3	—	2·5	—	2·4	—	3·1	—	7·4	—	5·7	—	4·2	—	6·4	—	4·6	—	5·7	—	—	—	4·4
	1871	—	4·3	—	6·1	—	7·5	—	7·5	—	7·5	—	7·7	—	7·3	—	8·3	—	7·7	—	8·4	—	7·5	—	7·7	—	7·9	—	—	—	7·6
	1872	—	11·4	—	10·4	—	7·4	—	6·6	—	8·6	—	8·5	—	8·3	—	11·2	—	12·0	—	10·9	—	9·8	—	7·6	—	10·3	—	—	—	9·3
	1873	—	7·9	—	5·9	—	4·8	—	4·7	—	5·6	—	4·3	—	5·1	—	5·1	—	4·7	—	5·9	—	6·3	—	5·1	—	5·4	—	—	—	5·3
	1874	—	10·0	—	4·5	—	3·4	—	3·9	—	3·9	—	5·3	—	4·2	—	5·5	—	5·0	—	4·5	—	6·8	—	4·2	—	5·2	—	—	—	4·7
	1875	—	8·7	—	5·5	—	4·2	—	4·9	—	6·4	—	6·0	—	5·4	—	6·5	—	7·6	—	9·8	—	7·0	—	6·5	—	7·5	—	—	—	6·4
	Means for 10 years, 1866-75	—	8·6	—	6·1	—	5·5	—	5·0	—	5·8	—	5·7	—	5·6	—	7·2	—	6·9	—	7·4	—	7·5	—	6·7	—	7·1	—	—	—	6·4
	1876	—	8·4	—	6·1	—	6·2	—	4·9	—	5·5	—	4·9	—	5·5	—	6·4	—	7·0	—	5·5	—	5·6	—	5·0	—	5·9	—	—	—	5·7
	1877	—	10·1	—	8·8	—	6·7	—	5·6	—	6·8	—	6·2	—	6·8	—	9·5	—	8·4	—	11·2	—	8·5	—	10·9	—	9·7	—	—	—	8·3
	1878	38	3·7	38	6·2	44	7·6	54	8·2	56	9·2	51	8·4	48	7·9	42	8·7	48	8·3	58	11·6	49	9·1	62	13·9	52	10·3	61	10·6	51	9·1
	1879	46	4·5	56	8·3	57	8·3	68	10·1	64	10·0	58	10·3	61	9·4	51	9·9	55	8·4	61	11·3	58	10·0	63	11·6	57	10·2	64	8·9	59	9·8
	1880	46	4·9	43	4·9	44	6·6	50	7·2	48	7·2	43	5·5	45	6·1	46	8·0	40	6·7	38	5·4	53	8·5	46	7·8	45	7·3	49	4·6	45	6·7
	1881	49	7·0	45	5·6	41	4·5	35	4·3	37	4·3	33	4·2	38	4·6	49	9·3	44	8·6	42	6·1	55	8·5	48	8·3	47	8·2	41	4·6	43	6·4
	1882	51	7·4	51	7·4	47	9·2	48	8·0	49	9·9	47	7·9	48	8·5	51	10·5	51	10·6	55	10·2	60	9·4	56	10·3	55	10·2	49	6·6	52	9·3
	1883	48	5·7	40	3·8	39	6·0	36	6·7	39	7·2	36	5·1	38	5·8	45	7·8	38	5·9	42	6·1	52	6·2	44	7·6	44	6·7	42	5·9	41	6·2
	1884	48	6·4	39	3·6	39	3·2	33	3·8	32	4·2	31	4·7	35	3·9	40	5·4	32	3·8	32	4·9	42	5·8	38	4·6	37	4·9	42	4·9	37	4·4
	1885	61	6·8	46	5·5	48	6·1	43	6·5	48	6·8	43	6·0	46	6·2	48	7·3	45	6·0	50	8·7	50	6·1	46	7·8	48	7·2	50	6·0	47	6·7
	Means for 10 years, 1876-85	—	6·5	—	6·0	—	6·5	—	6·4	—	7·1	—	6·3	—	6·5	—	8·3	—	7·4	—	8·1	—	7·8	—	8·8	—	8·1	—	—	—	7·3
	1886	59	6·7	46	6·4	46	6·1	43	5·2	50	9·4	45	6·4	46	6·7	48	8·8	49	9·4	46	7·3	50	7·9	50	8·2	49	8·3	50	6·2	48	7·5
	Means for 21 years, 1866-86	—	7·5	—	6·1	—	6·0	—	5·7	—	6·6	—	6·1	—	6·1	—	7·8	—	7·3	—	7·7	—	7·6	—	7·8	—	7·6	—	—	—	6·9
MEAN TEMPERATURE (in Degrees Fahrenheit).	1866	48°2		48·1		48°0		52°2		51°7		52°9		50°6		50°9		50°6		53°0		51°9		51°4		51°6		—		51°1	
	1867	47·2		49·9		48·5		52·7		52·2		52·8		51·2		51·1		51.6		53·6		53·1		52·9		52·5		—		51·9	
	1868	49·7		52·3		52·1		55·1		55·7		54·8		54·0		52·3		53·5		55·0		52·8		54·6		53·6		—		53·8	
	1869	47·7		49·4		49·2		50·9		51·6		51·7		50·6		50·1		50·3		53·5		51·3		52·6		51·6		—		51·1	
	1870	49·5		52·5		51·4		52·8		54·4		53·5		52·9		51·9		52·8		54·3		53·2		53·5		53·1		—		53·0	
	1871	47·2		48·4		47·9		49·5		51·7		51·2		49·7		50·8		50·7		53·7		52·4		53·9		52·3		—		51·0	
	1872	48·2		49·7		49·7		52·0		51·3		51·9		50·9		50·3		51·0		51·9		50·5		51·6		51·1		—		51·0	
	1873	47·9		49·8		49·1		49·8		51·6		51·7		50·4		51·7		51·3		52·5		51·9		53·2		52·1		—		51·3	
	1874	48·4		49·6		49·9		51·3		52·4		52·7		51·2		51·1		51·4		54·0		51·5		54·3		52·5		—		51·9	
	1875	49·3		51·4		51·2		52·4		52·8		52·9		52·1		51·7		52·0		53·1		51·9		53·3		52·4		—		52·3	
	Means for 10 years, 1866-75	48·3		50·1		49·7		51·9		52·5		52·6		51·4		51·2		51·5		53·5		52·1		53·1		52·3		—		51·8	
	1876	48·2		49·7		49·8		51·1		51·3		51·3		50·6		50·3		50·5		52·1		49·8		52·2		51·0		—		50·8	
	1877	46·6		47·5		48·4		50·8		51·1		51·8		49·9		49·1		49·5		52·3		49·3		52·2		50·5		—		50·2	
	1878	48·8		50·6		51·7		53·8		54·3		54·8		53·0		52·5		53·5		53·5		52·6		53·7		53·2		51·9		53·1	
	1879	45·0		46·8		47·5		48·8		49·0		49·8		48·4		48·4		48·6		50·0		48·4		50·0		49·1		50·7		48·8	
	1880	47·6		49·9		49·5		51·1		50·9		52·0		50·7		50·5		50·5		52·3		50·4		52·1		51·2		52·2		51·0	
	1881	46·8		50·1		50·6		52·6		52·9		53·5		51·9		50·8		51·8		52·5		51·8		52·8		51·9		53·4		51·9	
	1882	47·5		49·4		50·4		52·4		52·2		53·8		51·6		50·7		51·8		52·4		51·2		52·2		51·7		53·9		51·7	
	1883	47·3		50·1		50·2		52·1		52·2		52·9		51·5		50·0		51·0		51·7		50·5		51·5		50·9		52·6		51·2	
	1884	46·8		49·4		50·0		51·2		51·4		52·4		50·9		50·1		50·6		51·5		50·6		51·8		50·9		52·6		50·9	
	1885	45·8		48·6		49·0		50·5		50·2		51·8		50·0		48·3		49·0		50·0		48·7		49·6		49·1		51·1		49·6	
	Means for 10 years, 1876-85	47·0		49·2		49·7		51·4		51·6		52·4		50·9		50·1		50·7		51·8		50·3		51·8		50·9		—		50·9	
	1886	45·6		47·8		47·9		50·5		50·5		52·0		49·7		48·1		49·4		51·2		48·9		50·8		49·7		52·1		49·7	
	Means for 21 years, 1866-86	47·6		49·6		49·6		51·6		52·0		52·5		51·0		50·5		51·0		52·6		51·1		52·4		51·5		—		51·3	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-ONE YEARS, 1866 TO 1886.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
		Ins.	Ins.	Ins.
Rainfall	Driest	3·1 in 1870	4·0 in 1884	4·4 in 1870 and 1884
	Wettest	9·4 in 1879	10·3 in 1872 and 1878 10·2 in 1879 and 1882	9·8 in 1879
		°	°	°
Temperature	Coldest	48°3 in 1879	49°1 in 1879 and 1885	48°8 in 1879
	Warmest	54·0 in 1868	53·6 in 1868	53·8 in 1868

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE SECOND QUARTER, 1886.

YEAR AND MONTHS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.					
	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.
Rainfall.—Number of Days with Rain.																														
April - -	16	86	16	71	18	74	15	69	19	68	16	64	17	70	16	73	17	71	17	74	16	74	18	71	16	72	18	86	16	7
May - -	19	105	17	88	16	90	13	82	15	83	15	79	15	85	16	89	17	88	15	89	16	90	18	89	17	89	18	104	16	8
June - -	24	129	13	101	12	102	15	97	16	99	14	93	14	99	16	105	15	103	14	103	18	108	16	105	16	105	14	118	15	10
Rainfall.—Amounts in Inches.																														
April - -	2·19	11·65	0·95	6·81	1·73	8·05	1·49	6·38	2·23	8·69	1·70	8·03	1·62	7·59	3·16	14·34	2·58	11·78	2·67	13·42	2·17	12·18	2·78	13·96	2·72	13·14	2·20	11·10	2·17	10·3
May - -	2·09	13·74	2·58	9·39	2·34	10·39	2·57	8·95	4·77	13·46	3·05	11·08	3·06	10·65	3·32	17·66	3·61	15·39	2·92	16·34	3·15	15·33	3·69	17·65	3·34	16·48	2·23	13·33	3·20	13·5
June - -	2·39	16·13	2·83	12·22	1·99	12·38	1·17	10·12	2·36	15·82	1·65	12·73	2·00	12·65	2·29	19·95	3·02	18·41	1·74	18·08	2·54	17·87	1·69	19·34	2·26	18·74	1·79	15·12	2·13	15·7
Accumulated Heat.—Day Degrees above 42° F.																														
April - -	81	125	112	187	90	164	145	241	151	259	160	267	132	224	102	173	117	206	145	266	127	238	152	314	129	240	145	330	130	23
May - -	119	244	176	363	172	336	247	488	252	511	283	550	226	450	167	340	206	412	258	524	198	436	225	539	211	451	288	618	219	45
June - -	240	484	342	705	342	678	431	919	423	934	484	1034	404	854	336	676	377	789	440	964	362	798	443	982	392	843	466	1084	398	84
Accumulated Heat.—Day Degrees below 42° F.																														
April - -	77	622	76	708	52	673	42	726	46	697	25	580	48	677	51	560	37	594	23	485	49	477	33	395	39	503	4	202	43	59
May - -	39	661	26	734	24	697	24	750	24	721	10	590	22	699	18	578	18	612	5	490	14	491	2	397	11	514	0	202	17	60
June - -	8	669	0	734	0	697	0	750	0	721	0	590	0	699	1	579	0	612	0	490	1	492	4	401	1	515	0	202	0	60
Bright Sunshine.—Number of Hours.																														
April - -	166	371	155	348	109	276	129	327	117	290	133	313	129	311	141	291	117	288	139	325	128	271	133	336	132	302	165	427	131	36
May - -	172	543	148	496	100	376	154	481	123	413	164	477	138	449	127	418	121	409	157	482	130	401	119	455	131	433	177	604	134	44
June - -	181	724	220	716	169	545	232	713	185	598	251	728	211	660	182	600	187	596	255	737	160	561	197	652	196	629	284	888	204	64
Bright Sunshine.—Percentage of possible Duration.																														
April - -	42	27	40	27	29	22	35	25	31	22	35	23	34	24	37	21	31	21	37	24	33	19	35	25	35	22	44	32	35	2
May - -	38	32	33	29	23	23	37	28	30	25	39	28	32	27	29	25	29	24	38	28	30	23	28	27	31	25	43	36	32	2
June - -	29	32	36	30	29	23	41	31	32	26	44	31	36	28	31	26	32	26	45	31	28	24	34	28	34	27	51	37	35	2

1886.

EXPLANATION OF TABLES.

TABLES I. and Ia. are merely in continuation of the Tables given in the Quarterly Summary of the Weekly Weather Report, 1884. The whole of the values for 1878-86, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *April* are those for the fourteenth to seventeenth weeks in the year; those for *May* are for the eighteenth to the twenty-first weeks; those for *June* are for the twenty-second to the twenty-sixth weeks.

The figures given in the columns headed "Since Dec. 29" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0 are not included.

In the "Means for the Grazing, &c. Districts" the values for the "Channel Islands" are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX I.] *New Series.* THIRD QUARTER—JULY TO SEPTEMBER. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE THIRD QUARTER OF THE TWENTY-ONE YEARS, 1866 TO 1886.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	1866	—	11·8	—	10·6	—	9·3	—	7·9	—	11·7	—	9·7	—	9·8	—	15·1	—	16·1	—	15·2	—	12·0	—	8·9	—	13·5	—	—	—	11·7
	1867	—	10·0	—	10·1	—	7·1	—	7·1	—	7·4	—	8·6	—	8·1	—	12·9	—	10·4	—	8·7	—	11·8	—	8·8	—	10·5	—	—	—	9·3
	1868	—	9·7	—	10·4	—	6·0	—	4·2	—	7·1	—	7·2	—	7·0	—	9·1	—	6·7	—	9·5	—	8·1	—	11·0	—	8·9	—	—	—	8·0
	1869	—	12·8	—	7·0	—	5·8	—	5·6	—	6·4	—	6·0	—	6·2	—	10·4	—	11·5	—	9·9	—	9·4	—	8·5	—	9·9	—	—	—	8·1
	1870	—	8·6	—	5·8	—	3·5	—	5·8	—	4·5	—	4·8	—	4·9	—	6·8	—	5·0	—	7·0	—	7·6	—	5·7	—	6·4	—	—	—	5·7
	1871	—	13·0	—	8·7	—	9·7	—	7·5	—	10·8	—	10·3	—	9·4	—	9·8	—	11·8	—	14·2	—	11·1	—	10·5	—	11·5	—	—	—	10·5
	1872	—	12·1	—	12·5	—	10·4	—	9·8	—	9·4	—	6·6	—	9·7	—	16·1	—	15·8	—	13·1	—	14·7	—	11·2	—	14·2	—	—	—	12·0
	1873	—	13·7	—	11·8	—	7·2	—	6·4	—	6·8	—	7·3	—	7·9	—	15·7	—	11·8	—	14·0	—	14·2	—	11·8	—	13·5	—	—	—	10·7
	1874	—	15·5	—	11·6	—	5·8	—	5·1	—	7·1	—	6·3	—	7·2	—	13·4	—	12·6	—	13·8	—	11·8	—	10·1	—	12·3	—	—	—	9·8
	1875	—	11·2	—	8·9	—	9·1	—	8·6	—	11·5	—	9·4	—	9·5	—	11·2	—	12·7	—	15·3	—	9·2	—	10·6	—	11·8	—	—	—	10·7
	Means for 10 years, 1866–75	—	11·8	—	9·7	—	7·4	—	6·8	—	8·3	—	7·6	—	8·0	—	12·1	—	11·4	—	12·1	—	11·0	—	9·7	—	11·3	—	—	—	9·7
	1876	—	8·9	—	7·4	—	8·0	—	8·1	—	9·0	—	7·9	—	8·1	—	10·3	—	11·2	—	13·8	—	10·0	—	9·6	—	11·0	—	—	—	9·6
	1877	—	10·8	—	11·3	—	10·1	—	8·1	—	10·4	—	7·6	—	9·5	—	12·6	—	15·4	—	14·5	—	12·0	—	10·4	—	13·0	—	—	—	11·3
	1878	51	8·0	47	8·0	46	8·4	48	6·9	43	9·1	40	7·5	44	8·0	47	10·5	48	10·8	44	9·2	55	8·1	51	10·5	48	9·8	52	8·5	46	8·9
	1879	59	9·8	53	9·9	53	9·0	61	12·1	54	10·8	56	11·2	55	10·6	64	15·8	62	13·9	61	12·9	68	15·5	64	12·4	64	14·1	63	10·3	60	12·4
	1880	40	7·5	46	7·7	45	10·5	46	10·0	44	11·2	43	9·4	46	9·8	46	9·4	46	10·0	47	7·7	54	9·8	49	10·8	48	9·5	55	8·0	47	9·7
	1881	49	6·5	50	9·1	51	10·3	51	8·5	47	8·3	47	8·2	49	8·9	55	10·4	50	11·0	49	9·4	63	8·6	55	10·3	54	9·9	51	7·8	52	9·4
	1882	60	8·2	57	8·0	56	6·9	48	7·0	55	8·1	49	7·2	53	7·4	57	12·3	55	11·5	57	13·2	65	11·5	59	11·1	59	11·9	59	8·1	56	9·7
	1883	59	8·5	57	10·1	54	8·3	52	8·1	50	8·9	49	6·7	52	8·4	54	12·2	51	9·8	58	10·1	61	11·4	57	12·8	56	11·3	62	9·5	54	9·9
	1884	53	7·8	48	6·3	35	5·3	38	7·4	40	6·2	44	5·9	41	6·2	55	12·3	48	9·0	52	8·6	59	10·2	48	7·1	52	9·4	52	7·1	47	7·8
	1885	59	8·1	45	6·0	36	5·7	36	6·2	35	5·9	33	5·1	37	5·8	46	11·6	43	7·8	42	8·8	51	9·9	46	9·9	46	9·6	45	5·7	42	7·7
	Means for 10 years, 1876–85	—	8·4	—	8·4	—	8·3	—	8·2	—	8·8	—	7·7	—	8·3	—	11·7	—	11·2	—	10·8	—	10·7	—	10·5	—	10·9	—	—	—	9·6
	1886	59	8·7	43	5·0	41	6·8	38	6·5	39	6·4	35	5·8	39	6·1	48	11·4	42	10·3	40	9·3	54	9·3	53	10·9	47	10·2	48	7·2	43	8·2
	Means for 21 years, 1866–86	—	10·1	—	8·9	—	7·8	—	7·5	—	8·4	—	7·6	—	8·0	—	11·9	—	11·2	—	11·3	—	10·8	—	10·1	—	11·1	—	—	—	9·6
MEAN TEMPERATURE (in Degrees Fahrenheit).	1866		53°2		55°4		55°4		57°6		56°8		58°1		56°7		56°2		56°8		58°4		56°0		57°2		56°9		—		56°8
	1867		53·7		56·0		55·9		58·8		58·5		59·2		57·7		57·2		58·2		60·0		58·5		59·4		58·7		—		58·2
	1868		55·0		58·5		58·8		62·5		62·4		62·4		60·9		59·5		61·2		63·6		59·1		60·8		60·8		—		60·9
	1869		54·4		57·4		57·6		60·2		60·5		60·3		59·2		58·2		59·1		61·4		59·5		59·8		59·6		—		59·4
	1870		55·6		58·1		57·2		59·6		60·5		60·3		59·1		58·5		59·5		61·7		59·6		60·3		59·9		—		59·5
	1871		55·1		57·4		57·5		59·9		59·5		60·1		58·9		57·3		58·3		60·6		57·2		58·0		58·3		—		58·6
	1872		54·0		55·9		57·1		59·7		60·1		60·3		58·6		57·7		59·1		60·7		57·9		59·3		58·9		—		58·8
	1873		54·1		56·4		57·3		59·1		58·7		59·4		58·2		57·4		57·8		59·5		56·6		57·9		57·8		—		58·0
	1874		54·4		56·7		57·9		60·2		60·3		60·2		59·1		57·8		58·8		60·6		56·9		59·0		58·6		—		58·9
	1875		54·8		57·0		57·8		59·7		59·6		60·2		58·9		58·4		58·7		60·6		57·5		60·0		59·0		—		59·0
	Means for 10 years, 1866–75		54·4		56·9		57·3		59·7		59·7		60·1		58·7		57·8		58·8		60·7		57·9		59·2		58·9		—		58·8
	1876		54·3		56·3		57·7		60·4		60·7		61·1		59·2		57·6		58·8		61·0		56·6		59·4		58·7		—		59·0
	1877		52·7		55·0		55·5		57·9		57·7		58·2		56·9		55·3		56·0		58·3		55·1		57·3		56·4		—		56·7
	1878		55·2		58·5		59·1		60·4		60·2		61·6		60·0		59·2		59·5		61·3		58·8		60·7		59·9		62·1		60·0
	1879		52·4		54·2		56·2		58·1		57·8		58·7		57·0		55·2		56·2		57·5		54·8		57·5		56·2		58·5		56·6
	1880		55·9		57·8		59·5		61·1		60·1		62·1		60·1		58·6		59·8		61·3		58·8		60·1		59·7		61·5		59·9
	1881		52·1		56·8		56·8		58·6		57·7		59·4		57·9		54·8		56·4		57·5		55·8		56·4		56·2		59·8		57·1
	1882		54·2		56·6		57·7		58·2		57·1		58·8		57·7		56·0		56·8		57·4		55·9		56·2		56·5		58·9		57·1
	1883		52·9		55·8		56·9		58·5		57·7		59·5		57·7		55·9		57·2		57·5		55·8		56·9		56·7		59·1		57·2
	1884		54·5		57·5		59·1		61·8		60·7		62·4		60·3		58·2		59·6		60·5		57·9		59·0		59·0		61·7		59·7
	1885		51·7		55·0		56·2		58·0		57·7		59·6		57·3		54·8		56·2		57·7		55·7		57·3		56·3		59·6		56·8
	Means for 10 years, 1876–85		53·6		56·4		57·5		59·3		58·7		60·1		58·4		56·6		57·7		59·0		56·5		58·1		57·6		—		58·0
	1886		52·4		56·1		58·1		60·2		59·7		61·3		59·1		55·8		57·7		59·4		56·5		58·2		57·5		61·0		58·3
	Means for 21 years, 1866–86		53·9		56·6		57·4		59·5		59·2		60·2		58·6		57·1		58·2		59·8		57·2		58·6		58·2		—		58·4

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-ONE YEARS, 1866 TO 1886.

——		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 4·9 in 1870	Ins. 6·4 in 1870	Ins. 5·7 in 1870
	Wettest	10·6 in 1879	14·2 in 1872	12·4 in 1879
Temperature	Coldest	56°7 in 1866	56°2 in 1879 and 1881	56°6 in 1879
	Warmest	60·9 in 1868	60·8 in 1868	60·9 in 1868

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE THIRD QUARTER, 1886.

YEAR AND MONTHS.	0. Scotland, N.		Principal Wheat-producing Districts.										Means for Wheat producing Districts.		Principal Grazing, &c. Districts.										Means for the &c. Grazing, Districts.		Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.				6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.							
	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.
Rainfall.—Number of Days with Rain.																														
July - -	18	147	15	116	12	114	13	110	13	112	11	104	13	112	15	120	13	116	13	116	17	125	15	120	15	120	14	132	14	116
August - -	19	166	15	131	14	128	14	124	13	125	12	116	14	126	14	134	14	130	13	129	17	142	17	137	15	135	18	150	15	131
September -	22	188	13	144	15	143	11	135	13	138	12	128	13	139	19	153	15	145	14	143	20	162	21	158	18	153	16	166	16	147
Rainfall.—Amounts in Inches.																														
July - -	2·87	19·00	2·16	14·38	3·41	15·79	3·16	13·28	2·50	18·32	2·50	15·23	2·75	15·40	3·28	23·23	3·75	22·16	3·66	21·74	2·96	20·83	2·95	22·29	3·32	22·06	3·05	18·17	3·04	18·74
August - -	2·30	21·30	1·11	15·49	2·08	17·87	2·01	15·29	1·93	20·25	1·29	16·52	1·68	17·07	2·18	25·41	2·38	24·54	2·26	24·00	2·35	23·18	3·31	25·60	2·50	24·56	2·03	20·20	2·09	20·83
September -	3·52	24·82	1·69	17·18	1·28	19·15	1·35	16·64	1·94	22·19	2·02	18·54	1·66	18·73	5·92	31·33	4·15	28·69	3·41	27·41	3·95	27·13	4·65	30·25	4·42	28·98	2·15	22·35	3·04	23·87
Accumulated Heat.—Day Degrees above 42° F.																														
July - -	308	792	444	1149	491	1169	527	1446	543	1477	556	1591	512	1366	429	1105	476	1265	521	1485	442	1240	491	1473	472	1315	549	1633	492	1341
August - -	268	1060	372	1521	416	1585	470	1916	468	1945	522	2113	450	1816	365	1470	420	1685	467	1952	400	1640	443	1916	419	1734	500	2133	435	1776
September -	342	1402	431	1952	517	2102	613	2529	552	2497	635	2748	550	2366	432	1902	495	2180	561	2513	443	2083	503	2419	487	2221	655	2788	519	2295
Accumulated Heat.—Day Degrees below 42° F.																														
July - -	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
August - -	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
September -	0	669	6	740	0	697	0	750	0	721	0	590	1	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	1	608
Bright Sunshine.—Number of Hours.																														
July - -	136	860	179	895	174	719	221	934	190	788	229	957	199	859	180	780	185	781	219	956	128	689	171	823	177	806	261	1149	188	833
August - -	121	981	148	1043	123	842	144	1078	134	922	142	1099	138	997	130	910	149	930	136	1092	91	780	107	930	123	929	190	1339	131	964
September -	140	1121	158	1201	127	969	211	1289	160	1082	193	1292	170	1167	127	1037	136	1066	143	1235	135	915	138	1068	136	1065	211	1550	153	1117
Bright Sunshine.—Percentage of possible Duration.																														
July - -	28	31	38	32	37	26	49	34	42	29	51	35	43	31	39	28	40	29	49	36	28	26	38	31	39	30	60	43	41	31
August - -	28	31	34	33	29	27	35	34	32	29	35	35	33	32	31	29	35	29	33	35	22	25	26	30	29	30	47	43	31	31
September -	31	31	34	33	28	27	47	36	35	30	43	36	37	32	28	29	30	29	32	35	31	25	31	29	30	29	47	43	34	31

1886.

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summary of the Weekly Weather Report, 1884. The whole of the values for 1878-86, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *July* are those for the twenty-seventh to thirtieth weeks in the year; those for *August* are for the thirty-first to the thirty-fourth weeks; those for *September* are for the thirty-fifth to the thirty-ninth weeks.

The figures given in the columns headed "Since Dec. 29" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0 are not included.

In the "Means for the Grazing, &c. Districts" the values for the "Channel Islands" are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX I.] *New Series.*

FOURTH QUARTER—OCTOBER TO DECEMBER.

[*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FOURTH QUARTER OF THE TWENTY-ONE YEARS, 1866 TO 1886.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	1866	—	20·6	—	9·0	—	6·0	—	5·9	—	6·7	—	6·3	—	6·8	—	14·4	—	15·3	—	12·4	—	11·9	—	9·2	—	12·6	—	—	—	9·7
	1867	—	16·8	—	5·7	—	4·8	—	5·7	—	5·5	—	5·8	—	5·5	—	10·4	—	10·3	—	12·1	—	9·6	—	7·5	—	10·0	—	—	—	7·8
	1868	—	19·0	—	10·3	—	9·5	—	7·9	—	9·7	—	11·4	—	9·8	—	15·1	—	18·5	—	18·3	—	14·0	—	14·3	—	16·0	—	—	—	12·9
	1869	—	19·8	—	9·8	—	7·9	—	9·1	—	7·7	—	8·5	—	8·6	—	14·0	—	13·6	—	14·3	—	13·1	—	9·5	—	12·9	—	—	—	10·8
	1870	—	16·0	—	9·3	—	10·5	—	8·4	—	8·6	—	9·5	—	9·3	—	10·6	—	16·0	—	15·9	—	14·6	—	12·2	—	13·9	—	—	—	11·6
	1871	—	15·1	—	7·3	—	5·4	—	4·3	—	4·2	—	4·6	—	5·2	—	10·7	—	10·7	—	12·4	—	7·6	—	9·4	—	10·2	—	—	—	7·7
	1872	—	18·0	—	15·0	—	11·6	—	10·6	—	12·0	—	16·5	—	13·1	—	16·3	—	17·4	—	25·1	—	16·8	—	17·6	—	18·6	—	—	—	15·9
	1873	—	21·2	—	9·6	—	3·5	—	4·6	—	4·6	—	6·5	—	5·8	—	11·7	—	10·6	—	9·4	—	7·9	—	7·7	—	9·5	—	—	—	7·7
	1874	—	17·8	—	9·2	—	8·0	—	7·0	—	7·4	—	10·6	—	8·4	—	14·4	—	15·0	—	16·0	—	13·0	—	12·7	—	14·2	—	—	—	11·3
	1875	—	13·7	—	11·1	—	10·1	—	9·6	—	11·4	—	11·2	—	10·7	—	12·5	—	12·7	—	18·5	—	10·1	—	13·1	—	13·4	—	—	—	12·1
	Means for 10 years, 1866-75	—	17·8	—	9·6	—	7·7	—	7·3	—	7·8	—	9·1	—	8·3	—	13·0	—	14·0	—	15·4	—	11·9	—	11·3	—	13·1	—	—	—	10·7
	1876	—	13·7	—	13·2	—	10·5	—	7·5	—	11·7	—	13·4	—	11·3	—	16·0	—	14·1	—	19·1	—	14·4	—	17·6	—	16·2	—	—	—	13·8
	1877	—	23·1	—	11·3	—	6·4	—	6·4	—	7·4	—	10·6	—	8·4	—	18·1	—	17·8	—	17·2	—	14·3	—	14·0	—	16·3	—	—	—	12·4
	1878	72	11·1	53	8·1	60	10·4	57	9·6	51	7·8	48	8·3	54	8·8	45	11·0	55	9·1	64	13·3	65	11·7	53	8·1	56	10·6	74	15·4	55	9·7
	1879	58	8·6	41	4·8	38	3·6	44	3·3	33	2·8	32	2·5	38	3·4	37	6·5	35	5·2	31	4·3	42	4·9	37	4·2	36	5·0	38	4·2	37	4·2
	1880	75	12·6	54	8·2	56	9·8	58	9·4	49	11·0	51	12·9	54	10·3	57	12·2	53	13·6	58	16·4	60	9·6	53	12·4	56	12·8	69	18·2	55	11·6
	1881	64	11·2	58	7·2	54	7·2	60	8·5	51	8·6	52	9·5	55	8·2	56	15·8	54	11·9	59	14·2	65	12·1	62	13·4	59	13·5	65	12·6	57	10·9
	1882	71	11·9	67	11·4	72	11·2	69	11·7	71	13·0	67	12·6	69	12·0	63	16·9	67	13·2	74	19·8	65	12·5	68	14·8	67	15·4	83	19·0	68	13·7
	1883	75	14·8	48	5·8	53	5·8	60	7·6	52	7·4	49	7·2	52	6·8	66	18·4	57	11·3	62	11·8	71	12·2	60	11·1	63	13·0	63	10·3	58	9·9
	1884	68	14·6	52	6·9	44	5·1	50	6·9	47	5·3	42	6·0	47	6·0	52	16·1	51	8·7	57	10·2	64	13·2	54	9·8	56	11·6	62	8·7	52	8·8
	1885	63	11·0	45	4·6	51	7·0	55	9·2	52	8·6	50	9·0	51	7·7	52	11·8	50	9·8	59	12·7	54	8·9	59	10·1	55	10·7	62	11·3	53	9·2
	Means for 10 years, 1876-85	—	13·3	—	8·2	—	7·7	—	8·0	—	8·4	—	9·2	—	8·3	—	14·3	—	11·5	—	13·9	—	11·4	—	11·6	—	12·5	—	—	—	10·4
	1886	75	14·3	60	7·8	56	10·0	58	9·5	64	10·9	67	14·4	61	10·5	65	16·8	69	14·3	75	19·1	71	15·5	69	16·0	70	16·3	85	16·3	66	13·4
	Means for 21 years, 1866-86	—	15·5	—	8·8	—	7·8	—	7·7	—	8·2	—	9·4	—	8·4	—	13·8	—	12·8	—	14·9	—	11·8	—	11·7	—	13·0	—	—	—	10·7
MEAN TEMPERATURE (in Degrees Fahrenheit).	1866	43°6		44°2		45°1		46°1		45°7		46°8		45°6		46°0		46°2		50°3		45°4		46°9		47°0		—		46°3	
	1867	43·9		42·9		42·3		43·0		42·6		43·2		42·8		43·4		42·9		45·8		44·2		44·9		44·2		—		43·5	
	1868	42·0		42·0		43·1		44·8		44·3		45·5		43·9		43·6		44·2		48·1		44·0		45·5		45·1		—		44·5	
	1869	40·9		41·5		41·8		42·7		42·9		43·7		42·5		42·5		43·9		46·6		44·7		45·5		44·6		—		43·6	
	1870	40·3		40·0		40·3		41·6		41·3		41·9		41·0		40·5		41·6		44·4		41·5		43·2		42·2		—		41·6	
	1871	42·2		42·1		42·3		41·5		41·7		41·8		41·9		42·4		43·0		45·3		43·2		44·7		43·7		—		42·8	
	1872	42·4		42·0		43·3		44·4		44·2		45·4		43·9		43·6		44·4		47·3		42·8		44·1		44·4		—		44·2	
	1873	43·4		42·9		44·2		43·9		43·6		44·5		43·8		44·2		44·7		46·9		44·3		46·3		45·3		—		44·6	
	1874	41·4		39·9		40·8		41·8		41·7		43·0		41·4		40·5		42·3		46·0		42·8		45·7		43·5		—		42·5	
	1875	42·7		42·1		43·0		42·7		43·0		43·5		42·9		42·8		43·6		45·9		43·5		46·0		44·4		—		43·7	
	Means for 10 years, 1866-75	42·3		42·0		42·6		43·3		43·1		43·9		43·0		43·0		43·7		46·7		43·6		45·3		44·4		—		43·7	
	1876	44·0		43·4		45·2		46·2		44·8		47·2		45·4		44·6		46·1		49·0		45·7		48·1		46·7		—		46·1	
	1877	42·9		43·3		43·6		44·4		44·1		44·8		44·0		44·5		45·3		49·2		44·4		47·4		46·2		—		45·1	
	1878	40·5		39·7		39·8		40·8		40·7		42·3		40·7		40·9		41·5		44·5		42·1		42·8		42·4		47·4		41·6	
	1879	41·8		41·0		40·3		39·7		39·8		41·2		40·4		42·2		42·0		45·3		43·0		45·0		43·5		46·9		42·0	
	1880	39·1		40·4		42·4		43·6		42·7		45·3		42·9		42·2		43·6		47·7		42·9		44·9		44·3		49·7		43·6	
	1881	43·2		43·0		43·2		43·5		43·2		45·2		43·6		44·3		44·5		47·7		44·3		46·8		45·5		49·3		44·6	
	1882	41·3		40·1		43·6		43·5		42·8		45·5		42·9		42·2		44·0		46·5		42·8		44·6		44·0		49·3		43·5	
	1883	42·4		43·0		43·8		44·2		43·8		45·6		44·1		44·3		45·0		46·9		44·6		46·5		45·5		49·5		44·8	
	1884	44·4		42·6		43·8		43·6		43·3		45·3		43·7		43·8		44·4		46·2		44·1		45·1		44·7		49·3		44·2	
	1885	41·5		41·5		42·6		42·3		41·9		44·0		42·5		42·9		42·7		45·0		43·7		45·1		43·9		48·3		43·2	
	Means for 10 years, 1876-85	42·1		41·8		42·7		43·2		42·7		44·6		43·0		43·2		43·9		46·8		43·8		45·6		44·7		—		43·9	
	1886	42·6		42·5		43·6		43·9		43·5		45·6		43·8		44·4		44·7		46·3		44·2		45·8		45·1		49·8		44·5	
	Means for 21 years, 1866-86	42·2		41·9		42·7		43·2		42·9		44·3		43·0		43·1		43·8		46·7		43·7		45·5		44·6		—		43·8	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-ONE YEARS, 1866 TO 1886.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 3·4 in 1879	Ins. 5·0 in 1879	Ins. 4·2 in 1879
	Wettest	13·1 in 1872	18·6 in 1872	15·9 in 1872
Temperature	Coldest	40°4 in 1879	42°2 in 1870	41°6 in 1870 and 1878
	Warmest	45·6 in 1866	47·0 in 1866	46·3 in 1866

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE FOURTH QUARTER, 1886.

YEAR AND MONTHS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.					
	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.	For the Month.	Since Dec. 29.
RAINFALL.—NUMBER OF DAYS WITH RAIN.																														
October -	19	207	17	161	17	160	15	150	20	158	20	148	18	157	18	171	18	163	23	166	18	181	18	176	19	172	26	192	19	165
November -	25	232	21	182	17	177	20	170	22	180	23	171	20	177	23	194	25	188	25	191	24	205	25	201	25	197	27	219	22	187
December -	31	263	22	204	22	199	23	193	22	202	24	195	23	200	24	218	26	214	27	218	29	234	26	227	26	223	32	251	25	212
RAINFALL.—AMOUNTS IN INCHES.																														
October -	2·84	27·66	2·39	19·57	3·16	22·31	2·60	19·24	3·83	26·02	3·46	22·00	3·09	21·83	4·69	36·02	4·48	33·17	6·94	34·35	5·23	32·47	5·46	35·71	5·36	34·36	5·57	27·92	4·22	28·10
November -	4·33	31·99	2·09	21·66	3·14	25·45	2·97	22·21	2·41	28·43	4·49	26·49	3·02	24·85	5·57	41·59	4·56	37·73	4·78	39·13	4·29	36·76	4·03	39·74	4·65	39·01	3·79	31·71	3·83	31·93
December -	7·13	39·12	3·28	24·94	3·72	29·17	3·95	26·16	4·67	33·10	6·42	32·91	4·41	29·26	6·55	48·14	5·22	42·95	7·34	46·47	6·02	42·78	6·52	46·26	6·33	45·34	6·91	38·62	5·37	37·30
ACCUMULATED HEAT.—DAY DEGREES ABOVE 42° F.																														
October -	204	1606	234	2186	279	2381	328	2857	294	2790	357	3105	298	2664	265	2167	303	2485	323	2836	250	2333	287	2706	285	2506	400	3188	291	2586
November -	141	1750	153	2339	155	2536	177	3034	160	2950	206	3311	170	2834	166	2333	149	2634	203	3039	164	2497	198	2904	176	2682	295	3483	173	2759
December -	0	1750	0	2339	1	2537	11	3045	14	2964	37	3348	13	2847	10	2343	12	2646	53	3092	16	2513	57	2961	30	2712	105	3588	22	2781
ACCUMULATED HEAT.—DAY DEGREES BELOW 42° F.																														
October -	0	669	3	743	0	697	0	750	0	721	0	590	1	701	0	579	0	612	0	490	3	495	0	401	1	516	0	202	1	609
November -	35	704	49	792	43	740	48	798	46	767	31	621	43	744	16	595	9	621	12	502	22	517	15	416	15	531	0	202	29	638
December -	233	937	258	1050	244	984	274	1072	262	1029	203	824	248	992	197	792	202	823	160	662	186	703	157	573	180	711	32	234	214	852
BRIGHT SUNSHINE.—NUMBER OF HOURS.																														
October -	96	1217	55	1256	70	1039	103	1392	66	1148	92	1384	77	1244	69	1106	70	1134	81	1316	62	977	66	1134	69	1134	103	1653	73	1190
November -	60	1277	73	1329	75	1114	68	1460	50	1198	57	1441	65	1309	66	1172	63	1197	62	1378	76	1053	84	1218	70	1204	88	1741	67	1257
December -	32	1309	48	1377	80	1194	71	1531	67	1265	78	1519	69	1378	60	1232	55	1252	86	1464	44	1097	62	1280	61	1265	88	1829	65	1322
BRIGHT SUNSHINE.—PERCENTAGE OF POSSIBLE DURATION.																														
October -	34	30	19	33	24	27	35	36	22	30	30	36	26	32	24	28	23	29	27	35	21	25	22	29	23	29	33	44	25	31
November -	21	30	26	31	25	26	23	35	16	29	18	35	22	31	22	28	21	29	20	33	24	25	27	29	23	29	27	42	23	30
December -	14	30	25	31	31	27	27	35	26	29	29	34	28	31	24	28	22	28	31	33	17	25	24	29	24	29	31	41	26	30

1886.

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summary of the Weekly Weather Report, 1884. The whole of the values for 1878-86, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *October* are those for the fortieth to forty-third weeks in the year; those for *November* are for the forty-fourth to the forty-seventh weeks; those for *December* are for the forty-eighth to the fifty-third weeks.

The figures given in the columns headed "Since Dec. 29" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0 are not included.

In the "Means for the Grazing, &c. Districts" the values for the "Channel Islands" are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

SUMMARY OF THE WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX I.] *New Series.*

VALUES FOR THE WHOLE YEAR.

[*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE WHOLE YEAR DURING THE TWENTY-ONE YEARS, 1866 TO 1886.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in inches).	1866	—	53·4	—	35·7	—	26·3	—	27·2	—	31·8	—	34·1	—	31·0	—	50·0	—	51·1	—	51·0	—	44·3	—	38·3	—	46·9	—	—	—	39·0
	1867	—	48·1	—	33·3	—	24·1	—	24·7	—	27·7	—	29·0	—	27·8	—	43·7	—	40·1	—	46·0	—	43·2	—	36·3	—	41·9	—	—	—	34·9
	1868	—	58·7	—	38·5	—	24·1	—	20·7	—	26·8	—	30·2	—	28·1	—	49·5	—	42·9	—	45·6	—	41·7	—	42·1	—	44·4	—	—	—	36·3
	1869	—	51·1	—	31·0	—	27·4	—	25·9	—	29·3	—	30·1	—	28·7	—	40·6	—	44·9	—	46·4	—	42·3	—	37·9	—	42·4	—	—	—	35·6
	1870	—	40·5	—	25·9	—	23·1	—	20·4	—	20·7	—	22·7	—	22·6	—	33·6	—	35·7	—	37·8	—	37·2	—	32·2	—	35·3	—	—	—	29·0
	1871	—	41·8	—	29·0	—	26·4	—	23·1	—	27·3	—	28·7	—	26·9	—	40·5	—	38·9	—	45·0	—	36·9	—	37·0	—	39·7	—	—	—	33·3
	1872	—	49·7	—	49·1	—	37·2	—	33·1	—	39·8	—	41·7	—	40·2	—	58·8	—	59·2	—	68·6	—	54·0	—	49·5	—	58·0	—	—	—	49·1
	1873	—	50·7	—	34·5	—	20·8	—	21·1	—	24·1	—	26·5	—	25·4	—	42·5	—	36·7	—	43·4	—	37·2	—	36·5	—	39·3	—	—	—	32·4
	1874	—	54·8	—	31·8	—	20·7	—	19·1	—	24·1	—	26·6	—	24·5	—	41·9	—	43·6	—	46·8	—	40·0	—	34·7	—	41·4	—	—	—	33·0
	1875	—	42·0	—	32·5	—	27·3	—	26·8	—	35·1	—	33·3	—	31·0	—	40·0	—	41·7	—	56·2	—	33·4	—	40·4	—	42·3	—	—	—	36·7
	Means for 10 years, 1866-75	—	49·1	—	34·1	—	25·7	—	24·2	—	28·7	—	30·3	—	28·6	—	44·1	—	43·5	—	48·7	—	41·0	—	38·5	—	43·2	—	—	—	35·9
	1876	—	44·4	—	36·2	—	31·0	—	27·2	—	34·4	—	33·7	—	32·5	—	44·8	—	44·3	—	49·3	—	40·0	—	42·2	—	44·1	—	—	—	38·3
	1877	—	55·9	—	41·2	—	30·3	—	27·7	—	32·9	—	35·1	—	33·4	—	54·4	—	57·0	—	57·1	—	48·2	—	46·7	—	52·7	—	—	—	43·1
	1878	235	32·2	178	26·6	195	31·3	211	29·2	193	30·1	181	29·2	191	29·3	187	41·1	202	35·4	207	40·2	229	37·2	218	40·2	207	38·8	243	40·6	199	34·1
	1879	217	28·3	198	29·9	203	26·0	227	31·7	199	29·7	197	32·2	203	29·9	199	40·7	195	34·1	207	39·8	228	37·1	219	39·4	209	38·2	228	35·2	206	34·1
	1880	210	32·4	184	26·3	180	30·2	192	29·0	176	33·7	175	32·4	181	30·3	198	39·9	179	36·4	190	36·4	216	35·4	198	40·9	196	37·8	223	36·8	189	34·1
	1881	222	33·8	199	29·3	197	28·2	193	27·0	177	27·7	171	28·6	187	28·2	206	45·0	190	40·1	195	39·3	234	36·9	209	40·7	206	40·4	208	33·9	197	34·3
	1882	254	37·9	223	32·0	207	30·4	197	30·9	210	36·5	197	31·4	206	32·2	233	51·5	222	43·1	235	50·4	253	41·6	240	45·9	237	46·5	239	39·5	222	39·4
	1883	247	37·9	197	26·3	196	25·9	199	28·9	190	30·8	183	26·5	193	27·7	221	50·6	197	35·4	217	38·5	247	40·0	218	45·3	220	42·0	250	34·5	207	34·9
	1884	235	40·8	191	23·1	162	19·9	163	22·0	166	22·4	165	23·3	169	22·1	215	50·9	188	33·0	203	35·9	235	41·4	207	36·9	209	39·6	215	29·9	189	30·9
	1885	246	35·0	182	21·5	180	23·2	182	27·2	185	27·4	171	27·4	180	25·3	203	42·6	191	31·3	205	39·3	212	33·3	209	39·6	204	37·2	219	31·2	192	31·3
	Means for 10 years, 1876-85	—	37·9	—	29·2	—	27·6	—	28·1	—	30·6	—	30·0	—	29·1	—	46·2	—	39·0	—	42·6	—	39·1	—	41·8	—	41·7	—	—	—	35·4
	1886	263	39·1	204	24·9	199	29·2	193	26·2	202	33·1	195	32·9	199	29·3	218	48·1	214	43·0	218	46·5	234	42·8	227	46·3	222	45·3	251	38·6	211	37·3
	Means for 21 years, 1866-86	—	43·3	—	31·4	—	26·8	—	26·1	—	29·8	—	30·3	—	28·9	—	45·3	—	41·3	—	45·7	—	40·2	—	40·4	—	42·6	—	—	—	35·8
MEAN TEMPERATURE (in Degrees Fahrenheit).		°		°		°		°		°		°		°		°		°		°		°		°		°		°		°	
	1866	45·8		46·6		46·9		49·2		48·7		49·9		48·3		48·3		48·6		51·3		48·3		49·0		49·1		—		48·7	
	1867	45·4		46·5		45·9		48·3		47·9		48·6		47·4		47·4		47·8		50·2		48·5		49·3		48·6		—		48·0	
	1868	46·9		48·6		48·8		51·0		51·1		51·2		50·1		49·4		50·3		52·8		49·5		51·3		50·7		—		50·4	
	1869	45·8		47·2		47·3		48·7		49·1		49·4		48·3		48·2		48·9		51·7		49·6		50·6		49·8		—		49·1	
	1870	45·8		47·0		46·5		47·9		48·6		48·5		47·7		47·4		48·2		50·4		48·5		49·7		48·8		—		48·3	
	1871	46·1		46·9		46·6		47·5		48·3		48·4		47·5		47·6		48·0		50·7		48·6		50·0		49·0		—		48·3	
	1872	46·4		47·1		47·9		49·6		49·6		50·3		48·9		48·6		49·5		51·5		48·4		49·9		49·6		—		49·3	
	1873	46·1		46·9		47·3		47·9		48·3		48·9		47·9		48·1		48·4		50·4		48·2		49·6		48·9		—		48·4	
	1874	46·5		47·0		47·5		48·4		48·9		49·5		48·3		47·9		48·6		51·4		48·5		51·1		49·5		—		48·9	
	1875	46·6		47·4		47·7		48·4		48·7		49·2		48·3		48·2		48·6		50·6		48·3		51·0		49·4		—		48·9	
	Means for 10 years, 1866-75	46·1		47·1		47·2		48·7		48·9		49·4		48·3		48·1		48·7		51·1		48·7		50·2		49·4		—		48·9	
	1876	46·3		46·9		48·0		49·2		48·9		49·9		48·6		48·0		48·8		51·1		48·1		50·8		49·4		—		49·0	
	1877	45·2		46·2		47·0		48·7		48·7		49·5		48·0		47·4		48·2		51·2		47·6		50·5		49·0		—		48·5	
	1878	46·0		47·2		47·9		48·9		49·3		50·1		48·7		48·6		49·2		50·9		49·0		50·6		49·7		52·1		49·2	
	1879	43·8		44·1		45·0		45·8		45·8		46·9		45·5		45·6		45·9		48·4		46·1		48·3		46·9		49·6		46·2	
	1880	45·8		47·0		47·7		48·8		48·4		50·0		48·4		48·2		48·6		51·2		48·6		50·3		49·4		51·5		48·9	
	1881	44·1		45·4		46·2		47·7		47·4		49·1		47·2		46·3		47·3		49·4		47·4		49·0		47·9		51·8		47·6	
	1882	46·2		47·3		48·4		49·1		48·7		50·4		48·8		48·2		49·0		50·3		48·7		49·8		49·2		51·7		49·0	
	1883	45·3		46·9		47·4		48·5		48·2		49·7		48·1		47·6		48·3		49·6		48·0		49·4		48·6		51·5		48·4	
	1884	46·6		47·7		48·7		49·8		49·5		51·0		49·3		48·6		9·3		50·7		48·8		50·2		49·5		52·5		49·4	
	1885	44·4		45·9		46·8		47·5		47·3		49·0		47·3		46·4		6·9		48·7		47·2		48·6		47·6		50·7		47·5	
	Means for 10 years, 1876-85	45·4		46·5		47·3		48·4		48·2		49·6		48·0		47·5		48·2		50·2		48·0		49·8		48·7		—		48·4	
	1886	44·3		45·6		46·4		47·5		47·4		49·0		47·2		46·3		47·1		48·8		47·0		48·7		47·6		51·2		47·4	
	Means for 21 years, 1866-86	45·7		46·7		47·2		48·5		48·5		49·5		48·1		47·7		48·4		50·6		48·2		49·9		49·0		—		48·5	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST YEARS FOR THE TWENTY-ONE YEARS, 1866 TO 1886.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 22·1 in 1884	Ins. 35·3 in 1870	Ins. 29·0 in 1870
	Wettest	40·2 in 1872	58·0 in 1872	49·1 in 1872
Temperature	Coldest	° 45·5 in 1879	° 46·9 in 1879	° 46·2 in 1879
	Warmest	50·1 in 1868	50·7 in 1868	50·4 in 1868

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1.—Rainfall.

The mean values for the Rainfall in the various districts given as Table I. in the various Quarterly Summaries were obtained as follows. Those for the years 1866 to 1877 were derived from observations made at the following stations:—

Districts.		Stations.
0. SCOTLAND, N.		Loch Broom.
		Helmsdale.
		Sandwick Manse.
1. SCOTLAND, E.		Inverness.
		Aberdeen.
		Ballater.
		Logierait.
		Stirling.
		Hawick.
2. ENGLAND, N.E.		N. Shields.
		York.
		Grimsby.
		Boston.
3. ENGLAND, E.	1866 to 1875.	Fakenham.
		Beccles.
		Witham.
		Bury St. Edmunds.
	1876 &1877.	Yarmouth.
		Cambridge.
		Bury St. Edmunds.
4. MIDLAND COUNTIES		Leicester.
		Derby.
		Tenbury.
		Shiffnal.
		Cirencester.
		Banbury.
		Hitchin.
5. ENGLAND, S.		Bridport.
		Selborne.
		Maidstone.
		London (Camden Town).
6. SCOTLAND, W.		Dumfries.
		Ayr.
		Castle Toward.
7. ENGLAND, N.W., and N. WALES		Llandudno.
		Manchester.
		Skipton.
8. ENGLAND, S.W., and S. WALES		Barnstaple.
		Bodmin.
		Haverfordwest.
		Rhayader.
9. IRELAND, N.		Galway.
		Bunninadden, Co. Sligo. (Doo Castle.)
		Waringstown.
		Strabane.
10. IRELAND, S.		Cork.
		Waterford.
		Killaloe.
		Portarlington.
		Monkstown, Co. Dublin.

(The values were obtained mainly from Symons' Monthly Meteorological Magazine, supplemented by some of the values contained in the Reports of the Rainfall Committee of the British Association, 1868–1876.)

2.—Temperature.

The Temperature values for the years 1866 to 1877 have been obtained from the following stations:—

Districts.		Stations.
0. SCOTLAND, N.		Sandwick Manse.
		Stornoway.
		Dunrobin.
1. SCOTLAND, E.		Culloden.
		Aberdeen.
		Perth.
		Leith.
2. ENGLAND, N.E.		Bywell.
		N. Shields.
		Hull.
3. ENGLAND, E.		Royston.
		Holkham.
		Norwich.
		Wisbeach.
		Somerleyton.
4. MIDLAND COUNTIES		Derby.
		Nottingham.
		Cardington.
		Oxford.
5. ENGLAND, S.		Marlborough.
		Greenwich.
		Streatley.
		London (Camden Town).
		Weybridge.
		Strathfield Turgiss.
		Osborne.
		Bournemouth.
		Worthing.
6. SCOTLAND, W.		Greenock.
		Cockermouth.
		Silloth.
		Carlisle.
7. ENGLAND, N.W., and N. WALES		Stonyhurst.
		Bradford.
		Leeds.
		Eccles.
		Liverpool.
		Llandudno.
8. ENGLAND, S.W., and S. WALES		Gloucester.
		Taunton.
		Barnstaple.
		Truro.
		Helston.
9. IRELAND, N.	1866 to 1873.	Belfast.
		Milltown (Banbridge).
		Armagh.†
		Athlone.*
	1874 to 1877.	Moville.
		Milltown.
		Armagh.
		Donaghadee.
10. IRELAND, S.	1866 to 1873.	Dublin.*
		Curragh Camp.
		Buttevant.*
		Cork.
		Valencia.†
	1874 to 1877.	Kingstown.
		Parsonstown.
		Cork.
		Roche's Point.
		Valencia.

(The values were obtained mainly from the returns published quarterly by the Registrar General, by the Scottish Meteorological Society (in their Quarterly Journal), and the reports of the Army Medical Department, besides the records of the two Irish observatories, Valencia and Armagh. The returns for Cork were furnished by R. Caulfield, Esq., LL.D.)

For the years 1878 to 1886 the means are obtained from the observations published in the Weekly Weather Report.

* Did not commence till January 1867.

† Did not commence till January 1869.

By Order,
ROBERT H. SCOTT,
Secretary.

WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX II.] *New Series.* [*Price 2s.*

TABLE I.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF RAINY DAYS IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886.

ERRATA.

Owing to some errors in the Minimum Temperatures reported from HOLYHEAD early in the year, the following corrections must be made in the Weekly Weather Reports for the present year:—

1. In the Summary on pp. 1, 5, 9, 13, and 17 of the corrected values for "ENGLAND, N.W." will read as follow:—

FOR WEEK ENDING	Temperature of the Air.										
	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.					
							For the Week.		Since December 29, 1885.			
	Highest.	Lowest.	Averages of				Above 42°	Below 42°	Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
			Daily Maxima.	Daily Minima.	Daily Mean.							
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Jan. 4 -	53	24	46·4	38·2	42·5	3 above.	19	11	19	+ 8	11	−12
„ 11 -	47	15	38·8	29·3	34·3	6 below.	0	54	19	+ 2	65	+ 3
„ 18 -	49	15	41·4	33·4	37·6	2 below.	0	31	19	− 7	96	− 1
„ 25 -	41	7	36·1	27·2	31·9	8 below.	0	71	19	−10	167	+24
Feb. 1 -	46	28	39·7	33·5	36·7	4 below.	0	37	19	−19	204	+33

2. In the Table given on pp. 4, 8, 12, 16, and 20, the values for HOLYHEAD will read as follow:

FOR WEEK ENDING	Temperature. (In degrees Fahrenheit.)							
	Highest observed.	Lowest observed.	Averages for the Week.			Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees).	
			Of Highest each day.	Of Lowest each day.	For whole of each day.		Above 42°	Below 42°
	°	°	°	°	°	°	°	°
Jan. 4 -	50	35	47·1	40·7	44·0	+ 0·9	19	4
„ 11 -	47	31	41·7	34·4	38·2	− 4·5	0	27
„ 18 -	49	34	42·7	37·7	40·3	− 2·1	2	16
„ 25 -	41	30	38·4	32·4	35·5	− 7·0	0	46
Feb. 1 -	45	32	41·9	34·6	38·4	− 4·3	0	25

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Sept. 29-Oct. 5 -	6	189	5	142	4	133	5	132	5	138	6	127	5	136	7	158	7	148	7	153	7	165	7	157	7	156	7	164	6	146
Oct. 6-12 - -	6	195	5	147	5	138	5	137	5	143	5	132	5	141	5	163	5	153	6	159	6	171	6	163	6	162	6	170	6	152
13-19 - -	5	200	4	151	6	144	6	143	4	147	4	136	5	146	2	165	3	156	3	162	3	174	3	166	3	165	5	175	4	156
20-26 - -	5	205	3	154	6	150	5	148	6	153	5	141	5	151	3	168	5	161	6	168	4	178	5	171	4	169	7	182	4	160
Oct. 27-Nov. 2 -	5	210	5	159	6	156	5	153	5	158	3	144	5	156	5	173	6	167	7	175	7	185	6	177	6	175	6	188	6	166
Nov. 3-9 - -	4	214	2	161	2	158	4	157	4	162	4	148	3	159	5	178	4	171	5	180	4	189	5	182	5	180	5	193	4	170
10-16 - -	4	218	2	163	3	161	3	160	3	165	3	151	3	162	3	181	2	173	2	182	2	191	3	185	3	183	2	195	3	173
17-23 - -	1	219	3	166	2	163	2	162	3	168	2	153	2	164	1	182	1	174	3	185	3	194	4	189	2	185	4	199	2	175
Nov. 24-30 - -	5	224	5	171	6	169	7	169	7	175	7	160	6	170	5	187	5	179	7	192	5	199	7	196	6	191	7	206	6	181
Dec. 1-7 - -	7	231	5	176	4	173	4	173	4	179	4	164	4	174	4	191	3	182	5	197	4	203	5	201	4	195	5	211	4	185
8-14 - -	6	237	2	178	2	175	3	176	1	180	2	166	2	176	3	194	2	184	1	198	2	205	1	202	2	197	1	212	2	187
15-21 - -	3	240	2	180	3	178	2	178	4	184	3	169	3	179	5	199	4	188	4	202	4	209	5	207	4	201	5	217	3	190
Dec. 22-28 - -	6	246	2	182	2	180	4	182	1	185	2	171	2	181	4	203	3	191	3	205	3	212	2	209	3	204	2	219	3	193

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WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX II.] [*Price 2s.*

New Series.

TABLE I.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF RAINY DAYS IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Number of Days with Rain.																													
1885.																														
Dec. 30, 1884 to Jan. 5, 1885	4	4	2	2	1	1	2	2	1	1	2	2	2	2	4	4	2	2	4	4	5	5	6	6	4	4	3	3	3	3
Jan. 6-12	6	10	5	7	5	6	6	8	5	6	4	6	5	7	5	9	4	6	6	10	6	11	5	11	5	9	7	10	5	8
13-19	3	13	3	10	4	10	5	13	5	11	3	9	4	11	1	10	1	7	1	11	1	12	2	13	1	10	3	13	3	11
20-26	2	15	1	11	2	12	2	15	3	14	2	11	2	13	3	13	3	10	4	15	4	16	5	18	4	14	4	17	3	14
Jan. 27-Feb. 2	5	20	6	17	6	18	6	21	7	21	7	18	7	20	7	20	7	17	7	22	6	22	7	25	7	21	7	24	7	21
Feb. 3-9	6	26	5	22	5	23	5	26	5	26	6	24	5	25	7	27	6	23	6	28	6	28	7	32	6	27	7	31	5	26
10-16	7	33	4	26	4	27	4	30	4	30	5	29	4	29	5	32	6	29	7	35	5	33	5	37	6	33	7	38	5	31
17-23	5	38	3	29	4	31	3	33	4	34	2	31	3	32	5	37	5	34	3	38	5	38	4	41	4	37	5	43	4	35
Feb. 24-Mar. 2	5	43	3	32	2	33	6	39	4	38	5	36	4	36	5	42	4	38	5	43	5	43	5	46	5	42	6	49	4	39
Mar. 3-9	5	48	5	37	5	38	5	44	4	42	4	40	5	41	3	45	5	43	3	46	3	46	3	49	4	46	5	54	5	44
10-16	3	51	1	38	0	38	0	44	0	42	0	40	0	41	2	47	1	44	0	46	1	47	0	49	1	47	0	54	0	44
17-23	6	57	4	42	3	41	2	46	4	46	3	43	3	44	4	51	4	48	3	49	5	52	4	53	4	51	4	58	4	48
24-30	6	63	4	46	4	45	2	48	4	50	2	45	3	47	6	57	5	53	5	54	5	57	5	58	5	56	4	62	4	52
Mar. 31-April 6	3	66	2	48	3	48	2	50	4	54	3	48	3	50	3	60	4	57	4	58	4	61	4	62	4	60	4	66	3	55
April 7-13	4	70	3	51	5	53	5	55	4	58	3	51	4	54	1	61	3	60	3	61	2	63	1	63	2	62	4	70	3	58
14-20	2	72	1	52	1	54	1	56	2	60	2	53	1	55	2	63	2	62	1	62	2	65	2	65	2	64	3	73	2	60
21-27	4	76	3	55	5	59	3	59	4	64	4	57	4	59	5	68	5	67	5	67	6	71	6	71	5	69	6	79	4	64
April 28-May 4	3	79	5	60	5	64	4	63	5	69	4	61	4	63	4	72	5	72	6	73	5	76	6	77	5	74	6	85	5	69
May 5-11	7	86	6	66	5	69	5	68	4	73	5	66	5	68	5	77	4	76	5	78	5	81	4	81	5	79	3	88	5	74
12-18	6	92	7	73	5	74	4	72	5	78	3	69	5	73	5	82	4	80	3	81	5	86	5	86	4	83	3	91	4	78
19-25	6	98	6	79	7	81	7	79	6	84	7	76	7	80	5	87	5	85	7	88	5	91	6	92	6	89	6	97	7	85
May 26-June 1	6	104	2	81	1	82	1	80	2	86	2	78	1	81	5	92	3	88	4	92	4	95	4	96	4	93	3	100	2	87
June 2-8	5	109	2	83	4	86	4	84	4	90	4	82	4	85	4	96	4	92	5	97	3	98	4	100	4	97	4	104	4	91
9-15	5	114	2	85	0	86	0	84	1	91	0	82	1	86	1	97	0	92	0	97	1	99	0	100	0	97	1	105	1	92
16-22	6	120	4	89	4	90	5	89	4	95	5	87	5	91	5	102	4	96	5	102	6	105	3	103	5	102	5	110	5	97
23-29	4	124	3	92	3	93	2	91	3	98	1	88	2	93	3	105	2	98	2	104	2	107	1	104	2	104	2	112	2	99
June 30-July 6	6	130	1	93	1	94	0	91	0	98	1	89	1	94	4	109	1	99	1	105	3	110	2	106	2	106	1	113	1	100
July 7-13	6	136	4	97	2	96	3	94	1	99	2	91	2	96	4	113	3	102	2	107	5	115	4	110	4	110	3	116	3	103
14-20	5	141	4	101	5	101	3	97	3	102	2	93	4	100	5	118	5	107	4	111	6	121	4	114	5	115	4	120	4	107
21-27	3	144	1	102	1	102	0	97	0	102	0	93	0	100	1	119	1	108	1	112	3	124	1	115	1	116	2	122	1	108
July 28-Aug. 3	2	146	2	104	1	103	1	98	0	102	0	93	1	101	1	120	1	109	1	113	1	125	0	115	1	117	0	122	1	109
Aug. 4-10	5	151	6	110	5	108	3	101	6	108	4	97	5	106	5	125	7	116	5	118	6	131	6	121	6	123	6	128	5	114
11-17	7	158	4	114	1	109	1	102	1	109	2	99	2	108	3	128	2	118	2	120	3	134	2	123	2	125	2	130	2	116
18-24	1	159	2	116	3	112	4	106	2	111	2	101	2	110	0	128	1	119	1	121	0	134	1	124	0	125	0	130	2	118
Aug. 25-31	1	160	1	117	1	113	1	107	3	114	3	104	2	112	1	129	1	120	4	125	2	136	4	128	2	127	5	135	2	120
Sept. 1-7	4	164	4	121	4	117	5	112	6	120	5	109	5	117	5	134	5	125	6	131	6	142	6	134	6	133	6	141	5	125
8-14	6	170	6	127	5	122	6	118	7	127	5	114	6	123	7	141	7	132	6	137	6	148	7	141	7	140	5	146	7	132
15-21	7	177	5	132	3	125	5	123	3	130	4	118	4	127	5	146	4	136	4	141	5	153	5	146	4	144	5	151	4	136
22-28	6	183	5	137	4	129	4	127	3	133	3	121	4	131	5	151	5	141	5	146	5	158	4	150	5	149	6	157	4	140
Sept. 29-Oct. 5	6	189	5	142	4	133	5	132	5	138	6	127	5	136	7	158	7	148	7	153	7	165	7	157	7	156	7	164	6	146
Oct. 6-12	6	195	5	147	5	138	5	137	5	143	5	132	5	141	5	163	5	153	6	159	6	171	6	163	6	162	6	170	6	152
13-19	5	200	4	151	6	144	6	143	4	147	4	136	5	146	2	165	3	156	3	162	3	174	3	166	3	165	5	175	4	156
20-26	5	205	3	154	6	150	5	148	6	153	5	141	5	151	3	168	5	161	6	168	4	178	5	171	4	169	7	182	4	160
Oct. 27-Nov. 2	5	210	5	159	6	156	5	153	5	158	3	144	5	156	5	173	6	167	7	175	7	185	6	177	6	175	6	188	6	166
Nov. 3-9	4	214	2	161	2	158	4	157	4	162	4	148	3	159	5	178	4	171	5	180	4	189	5	182	5	180	5	193	4	170
10-16	4	218	2	163	3	161	3	160	3	165	3	151	3	162	3	181	2	173	2	182	2	191	3	185	3	183	2	195	3	173
17-23	1	219	3	166	2	163	2	162	3	168	2	153	2	164	1	182	1	174	3	185	3	194	4	189	2	185	4	199	2	175
Nov. 24-30	5	224	5	171	6	169	7	169	7	175	7	160	6	170	5	187	5	179	7	192	5	199	7	196	6	191	7	206	6	181
Dec. 1-7	7	231	5	176	4	173	4	173	4	179	4	164	4	174	4	191	3	182	5	197	4	203	5	201	4	195	5	211	4	185
8-14	6	237	2	178	2	175	3	176	1	180	2	166	2	176	3	194	2	184	1	198	2	205	1	202	2	197	1	212	2	187
15-21	3	240	2	180	3	178	2	178	4	184	3	169	3	179	5	199	4	188	4	202	4	209	5	207	4	201	5	217	3	190
Dec. 22-28	6	246	2	182	2	180	4	182	1	185	2	171	2	181	4	203	3	191	3	205	3	212	2	209	3	204	2	219	3	193

A 24873. 350.—3/87. Wt. 44. E. & S.

TABLE I.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF RAINY DAYS IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	Numbers of Days with Rain.																													
1886.																														
Dec. 29, 1885, to Jan. 4, 1886	7	7	5	5	3	3	6	6	5	5	5	5	5	5	7	7	6	6	6	6	6	6	5	5	6	6	7	7	6	6
Jan. 5-11	7	14	4	9	5	8	5	11	4	9	5	10	5	10	5	12	5	11	5	11	5	11	4	9	5	11	6	13	5	11
12-18	7	21	4	13	5	13	5	16	6	15	5	15	5	15	7	19	6	17	7	18	6	17	6	15	6	17	7	20	5	16
19-25	6	27	7	20	6	19	6	22	6	21	6	21	6	21	4	23	4	21	5	23	4	21	3	18	4	21	6	26	5	21
Jan. 26-Feb. 1	6	33	5	25	5	24	4	26	6	27	5	26	5	26	5	28	6	27	6	29	6	27	5	23	5	26	7	33	5	26
Feb. 2-8	4	37	1	26	2	26	3	29	2	29	2	28	2	28	4	32	3	30	4	33	5	32	5	28	4	30	4	37	3	29
9-15	5	42	4	30	3	29	4	33	4	33	5	33	4	32	5	37	4	34	5	38	4	36	5	33	5	35	6	43	5	34
16-22	5	47	6	36	5	34	2	35	2	35	1	34	3	35	4	41	4	38	1	39	3	39	3	36	3	38	2	45	3	37
Feb. 23-Mar. 1	5	52	4	40	6	40	4	39	2	37	2	36	3	38	1	42	2	40	3	42	4	43	4	40	3	41	5	50	3	40
Mar. 2-8	5	57	4	44	3	43	3	42	1	38	2	38	3	41	3	45	2	42	3	45	2	45	1	41	2	43	5	55	2	42
9-15	2	59	2	46	4	47	2	44	1	39	0	38	2	43	0	45	1	43	0	45	0	45	1	42	1	44	0	55	2	44
16-22	6	65	5	51	5	52	5	49	5	44	5	43	5	48	6	51	6	49	6	51	6	51	6	48	6	50	6	61	5	49
23-29	5	70	4	55	4	56	5	54	5	49	5	48	5	53	6	57	5	54	6	57	7	58	7	55	6	56	7	68	6	55
Mar. 30-April 5	5	75	6	61	6	62	4	58	6	55	5	53	5	58	7	64	7	61	6	63	7	65	7	62	7	63	6	74	6	61
April 6-12	5	80	3	64	4	66	5	63	6	61	5	58	5	63	5	69	5	66	5	68	5	70	5	67	5	68	6	80	5	66
13-19	4	84	6	70	5	71	5	68	5	66	5	63	5	68	2	71	3	69	3	71	2	72	2	69	2	70	4	84	3	69
20-26	2	86	1	71	3	74	1	69	2	68	1	64	2	70	2	73	2	71	3	74	2	74	2	71	2	72	2	86	2	71
April 27-May 3	5	91	2	73	2	76	1	70	1	69	2	66	2	72	2	75	2	73	2	76	3	77	3	74	3	75	3	89	2	73
May 4-10	4	95	4	77	4	80	1	71	2	71	1	67	2	74	5	80	4	77	2	78	4	81	4	78	4	79	3	92	3	76
11-17	6	101	6	83	6	86	7	78	7	78	6	73	6	80	5	85	6	83	6	84	6	87	7	85	6	85	6	98	6	82
18-24	4	105	5	88	4	90	4	82	5	83	6	79	5	85	4	89	5	88	5	89	3	90	4	89	4	89	6	104	5	87
May 25-31	7	112	4	92	4	94	4	86	6	89	5	84	5	90	4	93	5	93	5	94	4	94	5	94	5	94	6	110	5	92
June 1-7	3	115	2	94	1	95	2	88	2	91	2	86	2	92	2	95	2	95	2	96	3	97	4	98	2	96	2	112	2	94
8-14	5	120	5	99	3	98	5	93	5	96	5	91	4	96	6	101	5	100	6	102	6	103	5	103	6	102	4	116	5	99
15-21	3	123	0	99	3	101	3	96	2	98	1	92	2	98	1	102	1	101	1	103	2	105	1	104	1	103	2	118	2	101
22-28	6	129	2	101	1	102	1	97	1	99	1	93	1	99	3	105	2	103	0	103	3	108	1	105	2	105	0	118	1	102
June 29-July 5	3	132	1	102	0	102	0	97	0	99	0	93	0	99	1	106	0	103	0	103	1	109	0	105	0	105	0	118	0	102
July 6-12	6	138	4	106	3	105	4	101	3	102	2	95	3	102	4	110	3	106	3	106	4	113	4	109	4	109	3	121	3	105
13-19	4	142	4	110	4	109	5	106	5	107	4	99	5	107	5	115	5	111	4	110	6	119	5	114	5	114	4	125	5	110
20-26	5	147	6	116	5	114	4	110	5	112	5	104	5	112	5	120	5	116	6	116	6	125	6	120	6	120	7	132	6	116
July 7-Aug. 2	6	153	4	120	4	118	4	114	4	116	3	107	4	116	3	123	4	120	4	120	4	129	4	124	4	124	3	135	4	120
Aug. 3-9	5	158	4	124	2	120	2	116	2	118	2	109	2	118	3	126	3	123	4	124	3	132	3	127	3	127	5	140	3	123
10-16	5	163	5	129	5	125	5	121	5	123	5	114	5	123	5	131	5	128	4	128	6	138	6	133	5	132	6	146	5	128
17-23	3	166	2	131	3	128	3	124	2	125	2	116	3	126	3	134	2	130	1	129	4	142	4	137	3	135	4	150	3	131
Aug. 24-30	5	171	2	133	0	128	0	124	1	126	0	116	1	127	5	139	2	132	1	130	5	147	4	141	3	138	2	152	2	133
Aug. 31-Sept. 6	5	176	2	135	4	132	4	128	5	131	4	120	4	131	4	143	4	136	6	136	5	152	5	146	5	143	5	157	5	138
Sept. 7-13	5	181	5	140	5	137	3	131	4	135	3	123	4	135	6	149	6	142	4	140	7	159	7	153	6	149	3	160	5	143
14-20	1	182	0	140	1	138	0	131	0	135	1	124	0	135	1	150	0	142	0	140	0	159	1	154	0	149	2	162	0	143
21-27	6	188	4	144	5	143	4	135	3	138	4	128	4	139	3	153	3	145	3	143	4	163	4	158	4	153	4	166	4	147
Sept. 28-Oct. 4	6	194	3	147	4	147	1	136	4	142	3	131	3	142	5	158	5	150	6	149	5	168	6	164	5	158	6	172	4	151
Oct. 5-11	5	199	4	151	4	151	5	141	5	147	6	137	5	147	5	163	5	155	6	155	5	173	4	168	5	163	6	178	5	156
12-18	5	204	5	156	6	157	6	147	7	154	6	143	6	153	6	169	6	161	6	161	6	179	6	174	6	169	7	185	6	162
19-25	3	207	5	161	3	160	3	150	4	158	5	148	4	157	2	171	2	163	5	166	2	181	2	176	3	172	7	192	3	165
Oct. 26-Nov. 1	3	210	4	165	4	164	3	153	5	163	5	153	4	161	5	176	4	167	6	172	4	185	6	182	5	177	6	198	5	170
Nov. 2-8	6	216	4	169	4	168	5	158	5	168	6	159	5	166	5	181	6	173	6	178	6	191	6	188	6	183	7	205	5	175
9-15	7	223	7	176	5	173	7	165	6	174	6	165	6	172	5	186	6	179	6	184	6	197	6	194	6	189	7	212	6	181
16-22	5	228	4	180	3	176	3	168	3	177	4	169	3	175	5	191	5	184	5	189	5	202	4	198	5	194	4	216	4	185
23-29	4	232	2	182	1	177	2	170	3	180	2	171	2	177	3	194	4	188	2	191	3	205	3	201	3	197	3	219	2	187
Nov. 30-Dec. 6	7	239	5	187	4	181	5	175	5	185	5	176	5	182	6	200	6	194	6	197	6	211	6	207	6	203	6	225	5	192
Dec. 7-13	6	245	5	192	5	186	5	180	6	191	7	183	5	187	5	205	6	200	7	204	6	217	6	213	6	209	7	232	6	198
14-20	6	251	4	196	5	191	4	184	2	193	3	186	4	191	3	208	4	204	4	208	5	222	3	216	4	213	7	239	4	202
21-27	6	257	5	201	4	195	5	189	5	198	6	192	5	196	5	213	6	210	7	215	6	228	6	222	6	219	7	246	5	207
Dec. 28-Jan. 3, 1887	6	263	3	204	4	199	4	193	4	202	3	195	4	200	5	218	4	214	3	218	6	234	5	227	4	223	5	251	5	212

TABLE II.—SHOWING THE WEEKLY AND PROGRESSIVE AMOUNTS OF RAINFALL IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.										Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Rainfall in Inches.																											
1885.																												
Dec. 30, 1884, to Jan. 5, 1885	0·69	0·69	0·31	0·31	0·02	0·02	0·04	0·04	0·02	0·02	0·07	0·07	0·09	0·09	0·60	0·60	0·13	0·13	0·28	0·28	0·58	0·58	1·07	1·07	0·53	0·53	0·39	0·39	0·31	0·31
Jan. 6-12	1·23	1·92	0·56	0·87	0·63	0·65	1·13	1·17	0·76	0·78	0·80	0·87	0·78	0·87	1·32	1·92	0·84	0·97	1·36	1·64	1·06	1·64	1·11	2·18	1·14	1·67	1·18	1·57	0·96	1·27
13-19	0·16	2·08	0·16	1·03	0·39	1·04	0·29	1·46	0·20	0·98	0·20	1·07	0·25	1·12	0·02	1·94	0·02	0·99	0·04	1·68	0·04	1·68	0·10	2·28	0·04	1·71	0·17	1·74	0·15	1·42
20-26	0·21	2·29	0·20	1·23	0·12	1·16	0·14	1·60	0·24	1·22	0·16	1·23	0·17	1·29	0·60	2·54	0·28	1·27	0·58	2·26	0·40	2·08	0·88	3·16	0·55	2·26	0·52	2·26	0·36	1·78
Jan. 27-Feb. 2	0·63	2·92	0·42	1·65	0·53	1·69	0·67	2·27	1·38	2·60	1·52	2·75	0·90	2·19	1·75	4·29	1·29	2·56	1·79	4·05	1·13	3·21	1·68	4·84	1·53	3·79	1·31	3·57	1·22	3·00
Feb. 3-9	1·19	4·11	1·18	2·83	0·60	2·29	0·45	2·72	0·74	3·34	0·79	3·54	0·75	2·94	1·71	6·00	1·13	3·69	1·10	5·15	1·19	4·40	1·89	6·73	1·40	5·19	0·88	4·45	1·07	4·07
10-16	1·20	5·31	0·72	3·55	0·31	2·60	0·84	3·56	0·99	4·33	1·23	4·77	0·82	3·76	1·36	7·36	0·47	4·16	1·07	6·22	0·62	5·02	0·41	7·14	0·79	5·98	0·98	5·43	0·80	4·87
17-23	0·64	5·95	0·33	3·88	0·24	2·84	0·22	3·78	0·30	4·63	0·32	5·09	0·28	4·04	1·09	8·45	1·00	5·16	0·54	6·76	0·98	6·00	1·55	8·69	1·03	7·01	0·85	6·28	0·66	5·53
Feb. 24-Mar. 2	0·50	6·45	0·18	4·06	0·11	2·95	0·49	4·27	0·44	5·07	0·63	5·72	0·37	4·41	0·74	9·19	0·42	5·58	1·00	7·76	0·71	6·71	1·29	9·98	0·83	7·84	0·64	6·92	0·60	6·13
Mar. 3-9	0·39	6·84	0·41	4·47	0·95	3·90	0·64	4·91	0·48	5·55	0·73	6·45	0·64	5·05	0·49	9·68	1·16	6·74	0·41	8·17	0·19	6·90	0·33	10·31	0·52	8·36	0·52	7·44	0·58	6·71
10-16	0·43	7·27	0·06	4·53	0·00	3·90	0·01	4·92	0·00	5·55	0·00	6·45	0·01	5·06	0·22	9·90	0·00	6·74	0·00	8·17	0·05	6·95	0·02	10·33	0·06	8·42	0·00	7·44	0·03	6·74
17-23	0·97	8·24	0·25	4·78	0·15	4·05	0·18	5·10	0·34	5·89	0·75	7·20	0·34	5·40	0·48	10·38	0·43	7·17	0·44	8·61	0·46	7·41	0·47	10·80	0·45	8·87	0·46	7·90	0·40	7·14
24-30	0·86	9·10	0·64	5·42	0·36	4·41	0·18	5·28	0·21	6·10	0·14	7·34	0·31	5·71	1·50	11·88	0·52	7·69	0·48	9·09	1·00	8·41	0·95	11·75	0·89	9·76	0·28	8·18	0·60	7·74
Mar. 31-April 6	0·62	9·72	0·30	5·72	0·37	4·78	0·22	5·50	0·83	6·93	0·51	7·85	0·45	6·16	0·84	12·72	0·95	8·64	1·12	10·21	1·10	9·51	1·29	13·04	1·06	10·82	0·82	9·00	0·75	8·49
April 7-13	0·29	10·01	0·54	6·26	0·73	5·51	0·53	6·03	0·23	7·16	0·12	7·97	0·43	6·59	0·20	12·92	0·13	8·77	0·11	10·32	0·08	9·59	0·02	13·06	0·11	10·93	0·19	9·19	0·27	8·76
14-20	0·19	10·20	0·04	6·30	0·05	5·56	0·26	6·29	0·43	7·59	0·39	8·36	·23	6·82	0·29	13·21	0·19	8·96	0·18	10·50	0·28	9·87	0·18	13·24	0·23	11·16	0·08	9·27	0·23	8·99
21-27	0·58	10·78	0·51	6·81	0·56	6·12	0·45	6·74	0·54	8·13	0·34	8·70	0·48	7·30	1·47	14·68	0·88	9·84	1·10	11·60	1·20	11·07	2·07	15·31	1·34	12·50	0·78	10·05	0·91	9·90
April 28-May 4	0·32	11·10	0·68	7·49	0·91	7·03	0·65	7·39	0·40	8·53	0·54	9·24	0·64	7·94	0·64	15·32	0·36	10·20	0·81	12·41	0·57	11·64	0·66	15·97	0·61	13·11	1·06	11·11	0·62	10·52
May 5-11	0·61	11·71	0·73	8·22	0·46	7·49	0·65	8·04	0·33	8·86	0·64	9·8	0·56	8·50	0·51	15·83	0·40	10·60	0·58	12·99	0·49	12·13	0·33	16·30	0·46	13·57	0·09	11·20	0·51	11·03
12-18	0·51	12·22	0·63	8·85	0·53	8·02	0·43	8·47	0·33	9·19	0·26	10·14	0·43	8·93	0·36	16·19	0·25	10·85	0·11	13·10	0·55	12·68	0·46	16·76	0·35	13·92	0·17	11·37	0·39	11·42
19-25	0·52	12·74	1·15	10·00	0·78	8·80	1·41	9·88	1·10	10·29	1·41	11·55	1·17	10·10	0·91	17·10	0·73	11·58	1·83	14·93	0·65	13·33	1·01	17·77	1·02	14·94	1·41	12·78	1·10	12·52
May 26-June 1	0·64	13·38	0·07	10·07	0·07	8·87	0·24	10·12	0·07	10·36	0·16	11·71	0·12	10·22	0·45	17·55	0·10	11·68	0·23	15·16	0·44	13·77	0·42	18·19	0·33	15·27	0·15	12·93	0·23	12·75
June 2-8	0·82	14·20	0·11	10·18	0·74	9·61	1·23	11·35	1·57	11·93	1·03	12·74	0·94	11·16	0·62	18·17	0·85	12·53	1·12	16·28	0·27	14·04	0·97	19·16	0·76	16·03	0·22	13·15	0·85	13·60
9-15	0·32	14·52	0·05	10·23	0·00	9·61	0·00	11·35	0·04	11·97	0·00	12·74	0·02	11·18	0·03	18·20	0·00	12·53	0·00	16·28	0·02	14·06	0·00	19·16	0·01	16·04	0·04	13·19	0·01	10·61
16-22	0·90	15·42	0·52	10·75	0·20	9 81	0·29	11·64	0·28	12·25	0·52	13·26	0·36	11·54	0·77	18·97	0·56	13·09	0·59	16·87	0·40	14·46	0·24	19·40	0·51	16·55	0·55	13·74	0·44	14·05
23-29	0·50	15·92	0·19	10·94	0·73	10·54	0·14	11·78	0·69	12·94	0·09	13·35	0·37	11·91	0·20	19·17	0·62	13·71	0·94	17·81	0·07	14·53	0·16	19·56	0·40	16·95	0·41	14·15	0·38	14·43
June 30-July 6	0·51	16·43	0·22	11·16	0·04	10·58	0·01	11·79	0·04	12·98	0·06	13·41	0·07	11·98	0·65	19·82	0·28	13·99	0·01	17·82	0·37	14·90	0·45	20·01	0·35	17·30	0·02	14·17	0·21	14·64
July 7-13	0·92	17·35	0·20	11·36	0·21	10·79	0·40	12·19	0·08	13·06	0·14	13·55	0·21	12·19	0·76	20·58	0·40	14·39	0·36	18·18	0·97	15·87	0·48	20·49	0·59	17·89	0·37	14·54	0·40	15·04
14-20	0·58	17·93	0·54	11·90	0·57	11·36	0·14	12·33	0·22	13·28	0·12	13·67	0·32	12·51	0·75	21·33	1·20	15·59	0·64	18·82	1·34	17·21	0·66	21·15	0·92	18·81	0·11	14·65	0·62	15·66
21-27	0·18	18·11	0·05	11·95	0·16	11·52	0·00	12·33	0·01	13·29	0·02	13·69	0·05	12·56	0·09	21·42	0·01	15·60	0·05	18·87	0·37	17·58	0·20	21·35	0·14	18·95	0·02	14·67	0·10	15·76
July 28-Aug. 3	0·10	18·21	0·16	12·11	0·21	11·73	0·01	12·34	0·03	13·32	0·00	13·69	0·08	12·64	0·24	21·66	0·06	15·66	0·02	18·89	0·11	17·69	0·02	21·37	0·09	19·04	0·00	14·67	0·09	15·85
Aug. 4-10	0·74	18·95	0·99	13·10	1·35	13·08	0·45	12·79	1·23	14·55	0·28	13·97	0·86	13·50	1·65	23·31	1·18	16·84	0·97	19·86	0·88	18·57	1·89	23·26	1·32	20·36	0·57	15·24	1·09	16·94
11-17	0·63	19·58	0·88	13·98	0·21	13·29	0·18	12·97	0·27	14·82	0·10	14·07	0·33	13·83	0·69	24·00	0·54	17·38	0·26	20·12	0·66	19·23	0·25	23·51	0·48	20·84	0·16	15·40	0·40	17·34
18-24	0·02	19·60	0·04	14·02	0·40	13·69	0·61	13·58	0·33	15·15	0·09	14·16	0·29	14·12	0·00	24·00	0·05	17·43	0·07	20·19	0·00	19·23	0·08	23·59	0·04	20·88	0·00	15·40	0·16	17·50
Aug. 25-31	0·03	19·63	0·01	14·03	0·01	13·70	0·17	13·75	0·46	15·61	0·28	14·44	0·19	14·31	0·07	24·07	0·12	17·55	0·68	20·87	0·31	19·54	1·30	24·89	0·50	21·38	0·73	16·13	0·35	17·85
Sept. 1-7	0·57	20·20	0·39	14·42	0·61	14·31	1·04	14·79	1·06	16·67	1·06	15·50	0·83	15·14	1·01	25·08	0·92	18·47	1·17	22·57	1·16	20·70	1·45	26·34	1·25	22·63	1·13	17·26	1·04	18·89
8-14	1·15	21·35	1·04	15·46	0·72	15·03	1·80	16·59	1·49	18·16	1·67	17·17	1·34	16·48	2·82	27·90	1·66	20·13	2·37	24·94	1·98	22·68	1·83	28·17	2·13	24·76	1·07	18·33	1·73	20·62
15-21	1·35	22·70	0·77	16·23	0·14	15·17	0·65	17·24	0·24	18·40	0·83	18·00	0·53	17·01	1·80	29·70	0·62	20·75	0·58	25·52	0·90	23·58	0·78	28·95	0·93	25·69	0·72	19·05	0·73	21·35
22-28	1·35	24·05	0·71	16·94	1·11	16·28	0·72	17·96	0·42	18·82	0·42	18·42	0·67	17·68	1·05	30·75	0·71	21·46	1·07	26·59	0·86	24·44	0·55	29·50	0·85	26·54	0·82	19·87	0·76	22·11
Sept. 29-Oct. 5	2·09	26·14	0·37	17·31	0·25	16·53	0·31	18·27	0·55	19·37	0·85	19·27	0·47	18·15	2·63	33·38	1·38	22·84	1·35	27·94	1·62	26·06	1·39	30·89	1·67	28·21	1·20	21·07	1·07	23·18
Oct. 5-12	0·90	27·04	0·37	17·68	0·81	17·34	1·54	19·81	1·17	20·54	1·44	20·71	1·06	19·21	0·82	34·20	1·23	24·07	1·53	29·47	1·25	27·31	1·14	32·03	1·19	29·40	1·44	22·51	1·13	24·31
13-19	0·41	27·45	0·27	17·95	0·95	18·29	1·17	20·98	0·52	21·06	0·42	21·13	0·67	19·88	0·09	34·29	0·20	24·27	0·49	29·96	0·16	27·47	0·21	32·24	0·23	29·63	0·71	23·22	0·45	24·76
20-26	0·80	28·25	0·58	18·53	1·90	20·19	1·46	22·44	1·37	22·43	1·23	22·36	1·31	21·19	1·20	35·49	1·42	25·69	1·98	31·94	0·84	28·31	1·34	33·58	1·36	30·99	1·87	25·09	1·33	26·09
Oct. 27-Nov. 2	1·09	29·34	0·50	19·03	0·75	20·94	1·07	23·51	1·45	23·88	0·71	23·07	0·89	22·08	1·99	37·48	1·93	27·62	1·50	33·44	1·17	29·48	0·95	34·53	1·51	32·50	1·06	36·15	1·20	27·29
Nov. 3-9	0·73	30·07	0·18	19·21	0·13	21·07	0·97	24·48	0·53	24·41	0·62	23·69	0·49	22·57	0·93	38·41	0·57	28·19	0·58	34·02	0·77	30·25	0·69	35·22	0·71	33·21	0·64	26·79	0·60	27·89
10-16	0·35	30·42	0·11	19·32	0·28	21·35	0·25	24·73	0·15	24·56	0·10	23·79	0·18	22·75	0·14	38·55	0·13	28·32	0·11	34·13	0·11	30·36	0·10	35·32	0·12	33·33	0·02	26·81	0·15	28·04
17-23	0·10	30·52	0·09	19·41	0·13	21·48	0·08	24·81	0·17	24·73	0·14	23·93	0·12	22·87	0·05	38·60	0·11	28·43	0·37	34·50	0·32	30·68	0·49	35·81	0·26	33·59	0·44	27·25	0·19	28·23
Nov. 24-30	0·52	31·04	0·84	20·25	1·16	22·64	1·57	26·38	2·08	26·81	2·37	26·30	1·60	24·47	1·29	39·89	1·61	30·04	2·89	37·39	0·92	31·60	2·00	37·81	1·74	35·33	2·47	29·72	1·67	29·90
Dec. 1-7	1·88	32·92	0·75	21·00	0·19	22·83	0·19	26·57	0·35	27·16	0·72	27·02	0·44	24·91	1·12	41·01	0·52	30·56	1·23	38·62	0·85	32·45	1·07	38 88	0·96	36·29	1·10	30·82	0·70	30·60
8-14	0·83	33·75	0·11	21·11	0·22	23·05	0·31	26·88	0·03	27·19	0·06	27·08	0·15	25·06	0·41	41·42	0·16	30·72	0·05	38·67	0·12	32·57	0·06	38·94	0·16	36·45	0·03	30·85	0·16	30·76
15-21	0·41	34·16	0·29	21·40	0·12	23·17	0·04	26·92	0·07	27·26	0·11	27·19	0·12	25·18	0·68	42·10	0·29	31·01	0·24	38·91	0·43	33·00	0·41	39·35	0·41	36·86	0·17	31·02	0·26	31·02
Dec. 22-28	0·92	35·08	0·09	21·49	0·09	23·26	0·28	27·20	0·18	27·44	0·20	27·39	0·17	25·35	0·49	42·59	0·25	31·26	0·33	39·24	0·31	33 31	0·20	39·55	0·32	37·18	0·13	31·15	0·25	31·27

TABLE II.—SHOWING THE WEEKLY AND PROGRESSIVE AMOUNTS OF RAINFALL IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-Producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	Rainfall in Inches.																													
1886.																														
Dec. 29, 1885, to Jan. 4, 1886	2·09	2·09	0·61	0·61	0·26	0·26	0·59	0·59	0·46	0·46	0·70	0·70	0·52	0·52	2·47	2·47	1·70	1·70	1·04	1·04	1·15	1·15	0·69	0·69	1·41	1·41	0·77	0·77	0·97	0·97
Jan. 5–11	0·97	3·06	0·51	1·12	0·64	0·90	0·71	1·30	0·70	1·16	0·96	1·66	0·70	1·22	0·84	3·31	0·82	2·52	0·84	1·88	0·75	1·90	0·53	1·22	0·75	2·16	0·63	1·40	0·72	1·69
12–18	1·35	4·41	0·54	1·66	0·46	1·36	0·71	2·01	0·96	2·12	1·11	2·77	0·76	1·98	1·38	4·69	1·28	3·80	1·27	3·15	1·58	3·48	1·07	2·29	1·32	3·48	1·09	2·49	1·04	2·73
19–25	0·58	4·99	0·80	2·46	1·47	2·83	0·70	2·71	0·88	3·00	0·55	3·32	0·88	2·86	0·29	4·98	0·40	4·20	1·18	4·43	0·59	4·07	0·55	2·84	0·60	4·08	0·63	3·12	0·74	3·47
Jan. 26–Feb. 1	0·84	5·83	0·46	2·92	0·57	3·40	0·33	3·04	0·90	3·90	0·82	4·14	0·62	3·48	1·10	6·08	1·00	5·20	1·48	5·81	1·11	5·18	1·11	3·95	1·16	5·24	1·01	4·13	0·89	4·36
Feb. 2–8	0·26	6·09	0·13	3·05	0·09	3·49	0·16	3·20	0·21	4·11	0·24	4·38	0·16	3·64	0·64	6·72	0·29	5·49	0·31	6·12	1·04	6·22	1·07	5·02	0·67	5·91	0·54	4·67	0·42	4·78
9–15	1·17	7·26	0·51	3·56	0·08	3·57	0·22	3·42	0·24	4·35	0·25	4·63	0·26	3·90	1·02	7·74	0·55	6·04	0·61	6·73	0·72	6·94	0·66	5·68	0·71	6·62	0·42	5·09	0·48	5·26
16–22	0·36	7·62	0·52	4·08	0·40	3·97	0·03	3·45	0·08	4·43	0·01	4·64	0·21	4·11	0·49	8·23	0·41	6·45	0·03	6·76	0·30	7·24	0·79	6·47	0·41	7·03	0·06	5·15	0·31	5·57
Feb. 23–Mar. 1	0·28	7·90	0·38	4·46	0·71	4·68	0·46	3·91	0·49	4·92	0·34	4·98	0·48	4·59	0·10	8·33	0·51	6·96	0·70	7·46	0·45	7·69	1·02	7·49	0·56	7·59	0·80	5·95	0·52	6·09
Mar. 2–8	0·39	8·29	0·18	4·64	0·42	5·10	0·15	4·06	0·14	5·06	0·17	5·15	0·21	4·80	0·13	8·46	0·11	7·07	0·22	7·68	0·13	7·82	0·24	7·73	0·16	7·75	0·94	6·89	0·18	6·27
9–15	0·08	8·37	0·16	4·80	0·29	5·39	0·06	4·12	0·03	5·09	0·01	5·16	0·11	4·91	0·01	8·47	0·02	7·09	0·00	7·68	0·02	7·84	0·34	8·07	0·08	7·83	0·00	6·89	0·10	6·37
16–22	0·67	9·04	0·68	5·48	0·58	5·97	0·35	4·47	0·48	5·57	0·54	5·70	0·53	5·44	1·27	9·74	0·68	7·97	1·51	9·19	0·77	8·61	1·14	9·21	1·11	8·94	1·26	8·15	0·82	7·20
23–29	0·42	9·46	0·38	5·86	0·35	6·32	0·42	4·89	0·89	6·46	0·63	6·33	0·53	5·97	1·44	11·18	1·03	9·00	1·56	10·75	1·40	10·01	1·97	11·18	1·48	10·42	0·76	8·90	1·01	8·20
Mar. 30–April 5	0·78	10·24	0·45	6·31	0·62	6·94	0·40	5·29	1·17	7·63	0·66	6·89	0·64	6·61	1·71	12·89	1·46	10·46	0·90	11·65	1·04	11·05	1·22	12·40	1·27	11·69	0·54	9·44	0·96	9·16
April 6–12	0·65	10·89	0·15	6·46	0·42	7·36	0·82	6·11	0·63	8·26	0·78	7·67	0·56	7·17	1·19	14·08	0·84	11·30	1·03	12·68	0·77	11·82	1·20	13·60	1·01	12·70	0·96	10·40	0·78	9·94
13–19	0·14	11·03	0·28	6·74	0·57	7·93	0·25	6·36	0·34	8·60	0·32	7·99	0·35	7·52	0·15	14·23	0·29	11·59	0·27	12·95	0·24	12·06	0·06	13·66	0·20	12·90	0·64	11·04	0·28	10·22
20–26	0·62	11·65	0·07	6·81	0·12	8·05	0·02	6·38	0·09	8·69	0·04	8·03	0·07	7·59	0·11	14·34	0·19	11·78	0·47	13·42	0·12	12·18	0·30	13·96	0·24	13·14	0·06	11·10	0·15	10·37
April 27–May 3	0·44	12·09	0·33	7·14	0·24	8·29	0·14	6·52	0·31	9·00	0·29	8·32	0·26	7·85	0·28	14·62	0·21	11·99	0·22	13·64	0·38	12·56	0·68	14·64	0·36	13·50	0·29	11·39	0·31	10·68
May 4–10	0·24	12·33	0·42	7·56	0·49	8·78	0·07	6·59	0·20	9·20	0·03	8·35	0·24	8·09	0·56	15·18	0·59	12·58	0·06	13·70	0·46	13·02	0·48	15·12	0·43	13·93	0·13	11·52	0·34	11·02
11–17	0·90	13·23	0·66	8·22	1·20	9·98	1·54	8·13	3·33	12·53	1·61	9·96	1·67	9·76	1·71	16·89	1·89	14·47	1·87	15·57	1·87	14·89	1·78	16·90	1·82	15·75	0·43	11·95	1·74	12·76
18–24	0·51	13·74	1·17	9·39	0·41	10·39	0·82	8·95	0·93	13·46	1·12	11·08	0·89	10·65	0·77	17·66	0·92	15·39	0·77	16·34	0·44	15·33	0·75	17·65	0·73	16·48	1·38	13·33	0·81	13·57
May 25–31	0·62	14·36	1·49	10·88	0·87	11·26	0·44	9·39	1·06	14·52	0·92	12·00	0·96	11·61	0·63	18·29	1·41	16·80	0·69	17·03	0·52	15·85	0·55	18·20	0·76	17·24	1·06	14·39	0·86	14·43
June 1–7	0·22	14·58	0·37	11·25	0·76	12·02	0·17	9·56	0·72	15·24	0·15	12·15	0·43	12·04	0·24	18·53	0·64	17·44	0·42	17·45	0·45	16·30	0·42	18·62	0·43	17·67	0·13	14·52	0·43	14·86
8–14	0·71	15·29	0·86	12·11	0·22	12·24	0·30	9·86	0·48	15·72	0·46	12·61	0·46	12·50	1·03	19·56	0·73	18·17	0·58	18·03	1·31	17·61	0·64	19·26	0·86	18·53	0·36	14·88	0·66	15·52
15–21	0·20	15·49	0·00	12·11	0·11	12·35	0·22	10·08	0·06	15·78	0·08	12·69	0·10	12·60	0·16	19·71	0·03	18·20	0·03	18·06	0·10	17·71	0·03	19·29	0·07	18·60	0·24	15·12	0·09	15·61
22–28	0·64	16·13	0·11	12·22	0·03	12·38	0·04	10·12	0·04	15·82	0·04	12·73	0·05	12·65	0·24	19·95	0·21	18·41	0·02	18·08	0·16	17·87	0·05	19·34	0·14	18·74	0·00	15·12	0·09	15·70
June 29–July 5	0·64	16·77	0·07	12·29	0·00	12·38	0·00	10·12	0·00	15·82	0·00	12·73	0·02	12·67	0·14	20·09	0·00	18·41	0·00	18·08	0·10	17·97	0·00	19·34	0·05	18·79	0·00	15·12	0·04	15·74
July 6–12	0·50	17·27	0·30	12·59	0·12	12·50	0·83	10·95	0·42	16·24	0·56	13·29	0·45	13·12	0·75	20·84	0·44	18·85	0·87	18·95	0·33	18·30	0·46	19·80	0·57	19·36	0·43	15·55	0·51	16·25
13–19	1·19	18·46	0·87	13·46	1·02	13·52	0·83	11·78	0·92	17·16	0·88	14·17	0·90	14·02	1·42	22·26	0·81	19·66	1·19	20·14	1·54	19·84	1·06	20·86	1·20	20·56	1·09	16·64	1·05	17·30
20–26	0·54	19·00	0·92	14·38	2·27	15·79	1·50	13·28	1·16	18·32	1·06	15·23	1·38	15·40	0·97	23·23	2·50	22·16	1·60	21·74	0·99	20·83	1·43	22·29	1·50	22·06	1·53	18·17	1·44	18·74
July 27–Aug. 2	0·91	19·91	0·29	14·67	0·48	16·27	0·37	13·65	0·48	18·80	0·29	15·52	0·38	15·78	0·55	23·78	0·72	22·88	0·59	22·33	0·63	21·46	0·99	23·28	0·70	32·76	0·40	18·57	0·54	19·28
Aug. 3–9	0·30	20·21	0·20	14·87	0·21	16·48	0·38	14·03	0·68	19·48	0·20	15·72	0·33	16·11	0·34	24·12	0·46	23·34	0·58	22·91	0·27	21·73	0·18	23·46	0·37	23·13	0·61	19·18	0·35	19·63
10–16	0·95	21·16	0·56	15·43	0·85	17·33	0·65	14·68	0·68	20·16	0·49	16·21	0·65	16·76	0·99	25·11	1·08	24·42	1·06	23·97	1·10	22·83	1·31	24·77	1·11	24·24	0·72	19·90	0·88	20·51
17–23	0·14	21·30	0·06	15·49	0·54	17·87	0·61	15·29	0·09	20·25	0·31	16·52	0·32	17·08	0·30	25·41	0·12	24·54	0·03	24·00	0·35	23·18	0·83	25·60	0·32	24·56	0·30	20·20	0·32	20·83
Aug. 24–30	0·71	22·01	0·09	15·58	0·01	17·88	0·00	15·29	0·01	20·26	0·01	16·53	0·02	17·10	0·74	26·15	0·13	24·67	0·09	24·09	0·90	24·08	0·46	26·06	0·47	25·03	0·12	20·32	0·25	21·08
Aug. 31–Sept. 6	0·56	22·57	0·29	15·87	0·30	18·18	0·47	15·76	0·91	21·17	0·99	17·52	0·59	17·69	1·64	27·79	0·78	25·45	1·20	25·29	0·52	24·60	0·72	26·78	0·97	26·00	0·77	21·09	0·78	21·86
Sept. 7–13	1·27	23·84	0·96	16·83	0·62	18·80	0·56	16·32	0·60	21·77	0·43	17·95	0·64	18·33	2·63	30·42	1·98	27·43	1·03	26·32	2·04	26·64	2·33	29·11	2·00	28·00	0·54	21·63	1·32	23·18
14–20	0·15	23·99	0·02	16·85	0·02	18·82	0·00	16·32	0·00	21·77	0·04	17·99	0·02	18·35	0·15	30·57	0·00	27·43	0·00	26·32	0·00	26·64	0·09	29·20	0·05	28·05	0·06	21·69	0·08	23·21
21–27	0·83	24·82	0·33	17·18	0·33	19·15	0·32	16·64	0·42	22·19	0·55	18·54	0·39	18·74	0·76	31·33	1·26	28·69	1·09	27·41	0·60	27·24	1·05	30·25	0·95	29·00	0·66	22·35	0·67	23·88
Sept. 28–Oct. 4	0·69	25·51	0·80	17·98	0·90	20·05	0·05	16·69	0·79	22·98	0·36	18·90	0·58	19·32	1·09	32·42	1·27	29·96	1·36	28·77	1·32	28·56	1·11	31·36	1·23	30·23	0·64	22·99	0·90	24·78
Oct. 5–11	0·69	26·20	0·32	18·30	0·58	20·63	0·62	17·31	0·89	23·87	1·08	19·98	0·70	20·02	1·82	34·24	1·18	31·14	1·71	30·48	1·34	29·90	1·34	32·70	1·48	31·71	1·56	24·55	1·09	25·87
12–18	0·93	27·13	0·71	19·01	1·19	21·82	1·51	18·82	1·66	25·53	1·41	21·39	1·30	21·32	1·65	35·89	1·73	32 87	2·75	33·23	2·40	32·30	2·38	35·08	2·18	33·89	1·94	26·49	1·74	27·61
19–25	0·53	27·66	0·56	19·57	0·49	22·31	0·42	19·24	0·49	26·02	0·61	22·00	0·51	21·83	0·13	36·02	0·30	33·17	1·12	34·35	0·17	32·47	0·63	35·71	0·47	34·36	1·43	27·92	0·49	28·10
Oct. 26–Nov. 1	0·38	28·04	0·27	19·84	0·49	22·80	0·35	19·59	0·40	26·42	0·61	22·61	0·42	22·25	0·87	36·89	1·09	34·26	0·39	34·74	0·34	32·81	0·82	36·53	0·70	35·06	0·53	28·45	0·56	28·66
Nov. 2–8	1·09	29·13	0·58	20·42	1·99	24·79	0·83	20·42	0·81	27·23	1·72	24·33	1·19	23·44	1·87	38·76	1·87	36·13	2·46	37·20	1·31	34·12	1·41	37·94	1·79	36·85	2·06	30·51	1·49	30·15
9–15	0·97	30·10	0·63	21·05	0·51	25·30	1·53	21·95	0·90	28·13	1·54	25·87	1·02	24·46	1·26	40·02	0·74	36·87	0·85	38·05	1·68	35·80	1·12	39·06	1·13	37·98	0·77	31·28	1·07	31·22
16–22	1·09	31·19	0·44	21·49	0·41	25·41	0·22	22·17	0·19	28·32	0·53	26·40	0·30	24·76	1·00	41·02	0·44	37·31	0·76	38·81	0·49	36·29	0·34	39·40	0·61	38·59	0·18	31·46	0·45	31·67
23–29	0·80	31·99	0·17	21·66	0·04	25·45	0·04	22·21	0·11	28·43	0·09	26·49	0·09	24·85	0·57	41·59	0·42	37·73	0·32	39·13	0·47	36·76	0·34	39·74	0·42	39·01	0·25	31·71	0·26	31·93
Nov. 30–Dec. 6	1·79	33·78	0·79	22·45	0·27	25·72	0·65	22·86	0·57	29·00	0·66	27·15	0·59	25·44	1·42	43·01	1·21	38·94	1·12	40·25	1·32	38·08	0·74	40·48	1·16	40·17	0·98	32·69	0·88	32·81
Dec. 7–13	1·64	35·42	1·01	23·46	1·40	27·12	0·83	23·69	1·39	30·39	1·53	28·68	1·23	26·67	1·60	44·61	1·95	40·89	2·29	42·54	1·67	39·75	2·73	43·21	2·05	42·22	2·04	34·73	1·64	34·45
14–20	1·11	36·53	0·71	24·17	1·20	28·32	0·60	24·29	0·87	31·26	0·96	29·64	0·87	27·54	0·24	44·85	0·51	41·40	0·85	43·39	0·80	40·55	0·64	43·85	0·61	42·83	0·92	35·65	0·74	35·19
21–27	1·29	37·82	0·60	24·77	0·62	28·94	1·47	25·76	1·23	32·49	2·38	32·02	1·26	28·80	2·22	47·07	0·99	42·39	2·10	45·49	1·48	42·03	1·39	45·24	1·63	44·46	1·96	37·61	1·44	36·63
Dec. 28–Jan. 3, 1887	1·30	39·12	0·17	24·94	0·23	29·17	0·40	26·16	0·61	33·10	0·89	32·91	0·46	29·26	1·07	48·14	0·56	42·95	0·98	46·47	0·75	42·78	1·02	46·26	0·88	45·34	1·01	38·62	0·67	37·30

TABLE III.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT ABOVE 42° F. IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Day-Degrees above 42° Fahrenheit.																													
1885.																														
Dec. 30, 1884, to Jan. 5, 1885	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	20	20	28	28	11	11	10	10	6	6
Jan. 6-12	0	5	0	0	0	0	0	0	1	1	6	6	1	1	5	5	4	4	11	19	6	26	12	40	8	19	22	32	4	10
13-19	0	5	0	0	0	0	0	0	0	1	0	6	0	1	0	5	0	4	0	19	0	26	0	40	0	19	0	32	0	10
20-26	0	5	0	0	0	0	0	0	0	1	0	6	0	1	0	5	0	4	4	23	6	32	22	62	6	25	6	38	3	13
Jan. 27-Feb. 2	7	12	8	8	25	25	29	29	31	32	31	37	25	26	18	23	24	28	34	57	23	55	28	90	26	51	38	76	26	39
Feb. 3-9	4	16	6	14	8	33	15	44	13	45	24	61	13	39	9	32	11	39	24	81	10	65	26	116	16	67	24	100	14	53
10-16	0	16	7	21	21	54	32	76	29	74	34	95	25	64	10	42	17	56	32	113	25	90	28	144	22	89	44	144	24	77
17-23	0	16	1	22	0	54	2	78	4	78	10	105	3	67	0	42	1	57	13	126	8	98	11	155	6	95	19	163	4	81
Feb. 24-Mar. 2	11	27	25	47	25	79	30	108	32	110	28	133	28	95	20	62	26	83	29	155	30	128	34	189	28	123	37	200	28	109
Mar. 3-9	0	27	2	49	0	79	12	120	9	119	15	148	8	103	6	68	4	87	14	169	8	136	17	206	10	133	22	222	9	118
10-16	23	50	34	83	17	96	14	134	17	136	16	164	20	123	18	86	14	101	15	184	18	154	19	225	17	150	15	237	18	136
17-23	0	50	13	96	12	108	19	153	18	154	19	183	16	139	12	98	10	111	18	202	15	169	28	253	16	166	18	255	16	152
24-30	10	60	16	112	12	120	18	171	16	170	19	202	16	155	12	110	12	123	24	226	26	195	30	283	21	187	22	277	19	171
Mar. 31-April 6	11	71	17	129	13	133	22	193	22	192	36	238	22	177	14	124	15	138	18	244	18	213	21	304	17	204	22	299	20	191
April 7-13	14	85	13	142	6	139	11	204	12	204	26	264	14	191	26	150	19	157	24	268	25	238	30	334	25	229	22	321	19	210
14-20	33	118	46	188	38	177	53	257	56	260	58	322	50	241	41	191	41	198	48	316	45	283	47	381	45	274	49	370	48	258
21-27	34	152	52	240	60	237	76	333	62	322	69	391	64	305	40	231	47	245	50	366	47	330	46	427	46	320	62	432	55	313
April 28-May 4	27	179	32	272	37	274	50	383	52	374	52	443	45	350	37	268	40	285	39	405	39	369	41	468	39	359	52	484	42	355
May 5-11	10	189	19	291	25	299	36	419	36	410	41	484	31	381	22	290	26	311	36	441	28	397	35	503	29	388	40	524	30	385
12-18	25	214	35	326	31	330	45	464	45	455	49	533	41	422	37	327	36	347	43	484	37	434	42	545	39	427	46	570	40	425
19-25	31	245	41	367	36	366	43	507	45	500	50	583	43	465	39	366	39	386	41	525	39	473	45	590	41	468	51	621	42	467
May 26-June 1	50	295	76	443	85	451	96	603	88	588	95	678	88	553	67	433	76	461	75	600	74	547	80	670	74	542	69	690	81	548
June 2-8	47	342	88	531	102	553	127	730	119	707	125	803	112	665	77	510	91	553	104	704	84	631	90	760	89	631	109	799	100	648
9-15	50	392	91	622	95	648	94	824	108	815	110	913	100	765	80	590	93	646	104	808	83	714	90	850	90	721	92	891	95	743
16-22	50	442	79	701	91	739	95	919	95	910	101	1014	92	857	74	664	85	731	91	899	74	788	86	936	82	803	98	989	87	830
23-29	61	503	90	791	78	817	104	1023	97	1007	119	1133	97	954	90	754	87	818	103	1002	78	866	91	1027	90	895	106	1095	94	924
June 30-July 6	78	581	122	913	118	935	120	1143	119	1126	133	1266	123	1077	94	848	107	925	110	1112	104	970	109	1136	105	998	109	1204	114	1038
July 7-13	78	659	110	1023	120	1055	130	1273	118	1244	125	1391	120	1197	88	936	102	1027	99	1211	91	1061	99	1235	96	1094	117	1321	108	1146
14-20	60	719	90	1113	104	1159	128	1401	121	1365	130	1521	115	1312	82	1018	101	1128	113	1324	87	1148	106	1341	98	1192	119	1440	106	1252
21-27	94	813	125	1238	136	1295	144	1545	170	1535	159	1680	147	1459	137	1155	150	1278	158	1482	141	1289	158	1499	149	1341	157	1597	148	1400
July 28-Aug. 3	72	885	92	1330	98	1393	117	1662	118	1653	140	1820	113	1572	116	1271	115	1393	124	1606	120	1409	130	1629	121	1462	132	1729	117	1517
Aug. 4-10	81	966	98	1428	110	1503	120	1782	113	1766	129	1949	114	1686	102	1373	104	1497	104	1710	97	1506	100	1729	101	1563	121	1850	108	1625
11-17	57	1023	83	1511	96	1599	109	1891	102	1868	123	2072	102	1788	76	1449	90	1587	104	1814	87	1593	99	1828	91	1654	127	1977	96	1721
18-24	76	1099	85	1596	87	1686	100	1991	98	1966	107	2179	96	1884	97	1546	102	1689	112	1926	109	1702	118	1946	108	1762	131	2108	102	1823
Aug. 25-31	43	1142	53	1649	77	1763	88	2079	84	2050	116	2295	84	1968	67	1613	75	1764	108	2034	81	1783	104	2050	87	1849	131	2239	86	1909
Sept. 1-7	71	1213	79	1728	89	1852	107	2186	103	2153	125	2420	100	2068	89	1702	93	1860	115	2149	95	1878	108	2158	100	1949	125	2364	100	2009
8-14	69	1282	78	1806	90	1942	97	2283	95	2248	109	2529	94	2162	76	1778	88	1948	96	2245	81	1959	92	2250	87	2036	113	2477	90	2099
15-21	50	1332	77	1883	91	2033	98	2381	102	2350	111	2640	96	2258	68	1846	88	2036	97	2342	71	2030	80	2330	81	2117	114	2591	89	2188
22-28	33	1365	46	1929	43	2076	53	2434	53	2403	54	2694	50	2308	40	1886	41	2077	50	2392	44	2074	48	2378	44	2161	80	2671	47	2235
Sept. 29-Oct. 5	32	1397	44	1973	48	2124	57	2491	50	2453	72	2766	54	2362	46	1932	53	2130	62	2454	41	2115	55	2433	51	2212	86	2757	52	2287
Oct. 6-12	23	1420	34	2007	32	2156	36	2527	38	2491	41	2807	37	2399	31	1963	31	2161	42	2496	30	2145	38	2471	35	2247	65	2822	36	2323
13-19	22	1442	26	2033	34	2190	33	2560	34	2525	39	2846	33	2432	32	1995	32	2193	40	2536	36	2181	36	2507	35	2282	55	2877	34	2357
20-26	10	1452	11	2044	20	2210	29	2589	23	2548	33	2879	23	2455	12	2007	20	2213	32	2568	25	2206	29	2536	24	2306	53	2930	24	2381
Oct. 27-Nov. 2	22	1474	28	2072	23	2233	24	2613	23	2571	31	2910	26	2481	21	2028	21	2234	32	2600	28	2234	31	2567	27	2333	49	2979	27	2408
Nov. 3-9	30	1504	39	2111	26	2259	24	2637	26	2597	30	2940	29	2510	34	2062	28	2262	39	2639	36	2270	48	2615	37	2370	51	3030	33	2441
10-16	3	1507	6	2117	6	2265	7	2644	5	2602	18	2958	8	2518	5	2067	18	2280	21	2660	11	2281	25	2640	16	2386	31	3061	12	2453
17-23	6	1513	0	2117	3	2268	2	2646	0	2602	7	2965	3	2521	1	2068	1	2281	17	2677	10	2291	23	2663	10	2396	34	3095	6	2459
Nov. 24-30	7	1520	10	2127	25	2293	33	2679	31	2633	43	3008	28	2549	18	2086	25	2306	52	2729	24	2315	39	2702	32	2428	69	3164	30	2489
Dec. 1-7	0	1520	0	2127	3	2296	7	2686	6	2639	22	3030	8	2557	4	2090	7	2313	21	2750	5	2320	14	2716	10	2438	43	3207	9	2498
8-14	2	1522	0	2127	0	2296	0	2686	0	2639	0	3030	0	2557	3	2093	0	2313	0	2750	4	2324	4	2720	2	2440	8	3215	1	2499
15-21	22	1544	25	2152	11	2307	19	2705	12	2651	21	3051	18	2575	24	2117	21	2334	23	2773	32	2356	41	2761	28	2468	27	3242	23	2522
Dec. 22-28	10	1554	13	2165	6	2313	2	2707	3	2654	4	3055	5	2580	10	2127	6	2340	8	2781	9	2365	10	2771	9	2477	20	3262	7	2529

TABLE III.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT ABOVE 42° F. IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.																	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.		Channel Islands.		Means for the British Islands generally.	
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	Day-Degrees above 42° Fahrenheit.																													
1886.																														
Dec. 29, 1885, to Jan. 4, 1886	5	5	11	11	12	12	12	12	17	17	24	24	15	15	21	21	19	19	23	23	22	22	27	27	22	22	32	32	19	19
Jan. 5-11	0	5	0	11	0	12	0	12	0	17	0	24	0	15	0	21	0	19	1	24	0	22	4	31	1	23	10	42	0	19
12-18	0	5	0	11	0	12	0	12	1	18	6	30	2	17	2	23	0	19	10	34	2	24	8	39	5	28	19	61	4	23
19-25	0	5	0	11	0	12	0	12	0	18	0	30	0	17	0	23	0	19	0	34	0	24	0	39	0	28	0	61	0	23
Jan. 26-Feb. 1	0	5	0	11	0	12	0	12	0	18	8	38	1	18	0	23	0	19	4	38	0	24	1	40	1	29	19	80	1	24
Feb. 2-8	0	5	0	11	0	12	0	12	0	18	0	38	0	18	0	23	0	19	2	40	5	29	11	51	4	33	7	87	2	26
9-15	4	9	10	21	3	15	0	12	1	19	0	38	3	21	7	30	5	24	7	47	13	42	24	75	11	44	10	97	7	33
16-22	0	9	0	21	0	15	0	12	0	19	0	38	0	21	0	30	0	24	0	47	4	46	6	81	2	46	3	100	1	34
Feb. 23-Mar. 1	0	9	0	21	0	15	0	12	0	19	0	38	0	21	0	30	0	24	0	47	0	46	0	81	0	46	3	103	0	34
Mar. 2-8	0	9	0	21	0	15	0	12	0	19	0	38	0	21	0	30	0	24	0	47	0	46	0	81	0	46	0	103	0	34
9-15	0	9	0	21	0	15	0	12	0	19	0	38	0	21	0	30	0	24	0	47	0	46	0	81	0	46	0	103	0	34
16-22	7	16	13	34	11	26	29	41	29	48	18	56	20	41	7	37	13	37	24	71	26	72	32	113	20	66	29	132	20	54
23-29	28	44	41	75	48	74	55	96	60	108	51	107	51	92	34	71	52	89	50	121	39	111	49	162	45	111	53	185	48	102
Mar. 30-April 5	13	57	?33	108	35	109	43	139	41	149	34	141	37	129	15	86	28	117	31	152	29	140	34	196	28	139	38	223	32	134
April 6-12	14	71	20	128	17	126	34	173	23	172	31	172	25	154	16	102	15	132	27	179	18	158	30	226	21	160	22	245	23	157
13-19	24	95	24	152	20	146	30	203	34	206	36	208	29	183	32	134	30	162	34	213	31	189	38	264	33	193	25	270	31	188
20-26	30	125	35	187	18	164	38	241	53	259	59	267	41	224	39	173	44	206	53	266	49	238	50	314	47	240	60	330	44	232
April 27-May 3	18	143	41	228	34	198	48	289	56	315	53	320	47	271	40	213	44	250	51	317	48	286	48	362	46	286	55	385	47	279
May 4-10	34	177	53	281	60	258	79	368	90	405	85	405	73	344	49	262	73	323	79	396	70	356	77	439	70	356	92	477	71	350
11-17	27	204	31	312	25	283	35	403	35	440	55	460	36	380	28	290	27	350	52	448	28	384	41	480	35	391	63	540	36	386
18-24	40	244	51	363	53	336	85	488	71	511	90	550	70	450	50	340	62	412	76	524	52	436	59	539	60	451	78	618	65	451
May 25-31	32	276	39	402	46	382	74	562	59	570	74	624	58	508	36	376	43	455	59	583	41	477	48	587	46	497	73	691	52	503
June 1-June 7	41	317	62	464	57	439	77	639	78	648	97	721	74	582	62	438	71	526	91	674	70	547	88	675	76	573	92	783	75	578
8-14	58	375	78	542	83	522	95	734	97	745	99	820	91	673	83	521	93	619	89	763	88	635	97	772	90	663	95	878	90	668
15-21	56	431	80	622	64	586	74	808	78	823	95	915	78	751	83	604	81	700	95	858	81	716	106	878	89	752	94	972	84	752
22-28	53	484	83	705	92	678	111	919	111	934	119	1034	103	854	72	676	89	789	106	964	82	798	104	982	91	843	112	1084	97	849
June 29-July 5	86	570	130	835	144	822	142	1061	161	1095	151	1185	146	1000	125	801	136	925	153	1117	138	936	152	1134	141	984	150	1234	144	993
July 6-12	62	632	101	936	110	932	123	1184	129	1224	134	1319	119	1119	91	892	108	1033	123	1240	99	1035	113	1247	107	1091	132	1366	113	1106
13-19	67	699	97	1033	113	1045	121	1305	120	1344	132	1451	116	1235	95	987	113	1146	125	1365	99	1134	114	1361	109	1200	134	1500	112	1218
20-26	93	792	116	1149	124	1169	141	1446	133	1477	139	1590	131	1366	118	1105	119	1265	120	1485	106	1240	112	1473	115	1315	133	1633	123	1341
July 27-Aug. 2	48	840	76	1225	85	1254	104	1550	100	1577	120	1710	97	1463	80	1185	89	1354	108	1593	84	1324	97	1570	92	1407	119	1752	95	1436
Aug. 3-9	69	909	102	1327	114	1368	127	1677	125	1702	136	1846	121	1584	96	1281	106	1460	123	1716	113	1437	123	1693	112	1519	131	1883	116	1552
10-16	69	978	90	1417	108	1476	116	1793	115	1817	132	1978	112	1696	92	1373	107	1567	113	1829	97	1534	107	1800	103	1622	127	2010	108	1660
17-23	82	1060	104	1521	109	1585	123	1916	127	1944	134	2112	120	1816	97	1470	118	1685	123	1952	106	1640	116	1916	112	1734	123	2133	116	1776
Aug. 24-30	92	1152	126	1647	139	1724	151	2067	151	2095	156	2268	145	1961	112	1582	135	1820	139	2091	120	1760	132	2048	128	1852	147	2280	137	1913
Aug. 31-Sept. 6	88	1240	104	1751	127	1851	157	2224	134	2229	155	2423	135	2096	104	1686	121	1941	119	2210	102	1862	106	2154	110	1972	132	2412	123	2036
Sept. 7-13	73	1313	93	1844	113	1964	127	2351	120	2349	132	2555	117	2213	87	1773	106	2047	119	2329	86	1948	103	2257	100	2072	139	2551	108	2144
14-20	46	1359	53	1897	73	2037	102	2453	83	2432	109	2664	84	2297	67	1840	73	2120	106	2435	73	2021	95	2352	83	2155	132	2683	83	2227
21-27	43	1402	55	1952	65	2102	76	2529	64	2496	83	2747	69	2366	62	1902	62	2182	78	2513	62	2083	67	2419	66	2221	105	2788	68	2295
Sept. 28-Oct. 4	61	1463	78	2030	97	2199	116	2645	111	2607	127	2874	106	2472	88	1990	104	2286	115	2628	90	2173	104	2523	100	2321	133	2921	103	2398
Oct. 5-11	67	1530	75	2105	78	2277	97	2742	89	2696	108	2982	89	2561	81	2071	89	2375	94	2722	73	2246	83	2606	84	2405	111	3032	86	2484
12-18	40	1570	46	2151	57	2334	62	2804	51	2747	63	3045	56	2617	57	2128	63	2438	57	2779	50	2296	57	2663	57	2462	78	3110	56	2540
19-25	36	1606	35	2186	47	2381	53	2857	43	2790	59	3104	47	2664	39	2167	47	2485	57	2836	37	2333	43	2706	44	2506	78	3188	46	2586
Oct. 26-Nov. 1	39	1645	43	2229	59	2440	64	2921	61	2851	78	3182	61	2725	55	2222	55	2540	72	2908	48	2381	55	2761	57	2563	85	3273	59	2645
Nov. 2-8	21	1666	28	2257	25	2465	34	2955	30	2881	38	3220	31	2756	23	2245	25	2565	34	2942	27	2408	33	2794	28	2591	53	3326	30	2675
9-15	23	1689	23	2280	22	2487	25	2980	21	2902	29	3249	24	2780	23	2268	22	2587	29	2971	28	2436	29	2823	26	2617	50	3376	25	2700
16-22	27	1716	28	2308	25	2512	31	3011	28	2930	37	3286	30	2810	31	2299	27	2614	41	3012	32	2468	47	2870	36	2653	63	3439	38	2753
23-29	34	1750	31	2339	24	2536	23	3034	20	2950	24	3310	24	2834	34	2333	20	2634	27	3039	29	2497	34	2904	29	2682	44	3483	26	2759
Nov. 30-Dec. 6	0	1750	0	2339	0	2536	1	3035	4	2954	9	3319	3	2837	8	2341	6	2640	15	3054	8	2505	26	2930	13	2695	27	3510	8	2767
Dec. 7-13	0	1750	0	2339	1	2537	10	3045	10	2964	27	3346	10	2847	1	2342	6	2646	26	3080	5	2510	13	2943	10	2705	31	3541	10	2777
14-20	0	1750	0	2339	0	2537	0	3045	0	2964	0	3346	0	2847	0	2342	0	2646	0	3080	0	2510	0	2943	0	2705	13	3554	0	2777
21-27	0	1750	0	2339	0	2537	0	3045	0	2964	1	3347	0	2847	0	2342	0	2646	11	3091	0	2510	8	2951	4	2709	26	3580	2	2779
Dec. 28-Jan. 3, 1887	0	1750	0	2339	0	2527	0	3045	0	2964	0	3347	0	2847	1	2343	0	2646	1	3092	3	2513	10	2961	3	2712	8	3588	2	2781

TABLE IV.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT BELOW 42° F. IN EACH DISTRICT, FOR EACH OF THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.															
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.		Channel Islands.		Means for the British Islands generally.	
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Day-Degrees below 42° Fahrenheit.																													
1885.																														
Dec. 30, 1884, to Jan. 5 1885	18	18	37	37	43	43	55	55	56	56	40	40	46	46	32	32	43	43	27	27	13	13	11	11	25	25	18	18	36	36
Jan. 6-12	34	52	31	68	33	76	43	98	41	97	41	81	38	84	25	57	27	70	36	63	30	43	30	41	30	55	6	24	34	70
13-19	48	100	57	125	39	115	53	151	55	152	50	131	51	135	48	105	41	111	46	109	53	96	44	85	46	101	31	55	48	118
20-26	25	125	63	188	51	166	67	218	68	220	47	178	59	194	41	146	50	161	20	129	21	117	6	91	28	129	19	74	44	162
Jan. 27-Feb. 2	17	142	22	210	8	174	3	221	2	222	0	178	7	201	5	151	4	165	0	129	8	125	4	95	4	133	0	74	5	167
Feb. 3-9	25	167	27	237	27	201	27	248	26	248	10	188	23	224	23	174	22	187	11	140	30	155	17	112	21	154	0	74	22	189
10-16	46	213	34	271	11	212	5	253	5	253	0	188	11	235	23	197	7	194	0	140	15	170	6	118	10	164	0	74	11	200
17-23	56	269	56	327	39	251	39	292	45	298	35	223	43	278	39	236	40	234	31	171	40	210	35	153	37	201	6	80	40	240
Feb. 24-Mar. 2	21	290	12	339	10	261	13	305	10	308	3	226	10	288	9	245	7	241	0	171	9	219	1	154	5	206	0	80	7	247
Mar. 3-9	37	327	30	369	29	290	34	339	33	341	26	252	30	318	31	276	27	268	21	192	25	244	28	182	26	232	2	82	28	275
10-16	15	342	22	391	30	320	38	377	38	379	35	287	33	351	33	309	33	301	32	224	44	288	41	223	37	269	9	91	35	310
17-23	41	383	36	427	32	352	37	414	36	415	31	318	34	385	30	339	28	329	29	253	26	314	17	240	26	295	5	96	30	340
24-30	26	409	27	454	25	377	35	449	27	442	27	345	28	413	20	359	19	348	11	264	15	329	14	254	16	311	3	99	22	362
Mar. 31-April 6	29	438	30	484	29	406	36	485	37	479	23	368	31	444	30	389	31	379	27	291	27	356	28	282	28	339	4	103	30	392
April 7-13	23	461	20	504	14	420	19	504	19	498	13	381	17	461	14	403	11	390	13	304	13	369	14	296	13	352	3	106	15	407
14-20	12	473	17	521	11	431	16	520	17	515	6	387	14	475	10	413	13	403	8	312	8	377	10	306	10	362	0	106	12	419
21-27	2	475	0	521	0	431	0	520	0	515	0	387	0	475	0	413	0	403	0	312	0	377	0	306	0	362	0	106	0	419
April 28-May 4	2	477	1	522	0	431	1	521	0	521	1	388	2	477	0	413	0	403	3	315	1	378	0	306	1	363	0	106	2	421
May 5-11	31	508	27	549	15	446	16	537	18	539	7	395	17	494	27	440	14	417	10	325	17	395	17	323	17	380	0	106	17	438
12-18	16	524	15	564	9	455	16	553	14	553	7	402	12	506	11	451	8	425	6	331	8	403	5	328	8	388	0	106	10	448
19-25	4	528	1	565	0	455	6	559	5	558	0	402	2	508	2	453	0	425	0	331	4	407	0	328	1	389	0	106	1	449
May 26-June 1	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
June 2-8	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
9-15	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
16-22	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
23-29	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
June 30-July 6	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
July 7-13	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
14-20	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
21-27	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
July 28-Aug. 3	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
Aug. 4-10	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
11-17	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
18-24	0	528	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
Aug. 25-31	4	532	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
Sept. 1-7	0	532	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
8-14	0	532	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
15-21	0	532	0	565	0	455	0	559	0	558	0	402	0	508	0	453	0	425	0	331	0	407	0	328	0	389	0	106	0	449
22-28	4	536	1	566	0	455	5	564	11	569	3	405	4	512	0	453	0	425	1	332	0	407	1	329	0	389	0	106	2	451
Sept. 29-Oct. 5	3	539	1	567	0	455	0	564	1	570	0	405	1	513	0	453	0	425	0	332	0	407	0	329	0	389	0	106	0	451
Oct. 6-12	11	550	13	580	6	461	9	573	12	582	6	411	9	522	11	464	5	430	1	333	6	413	2	331	5	394	0	106	7	458
13-19	6	556	1	581	0	461	4	577	6	588	3	414	3	525	0	464	0	430	3	336	0	413	4	335	1	395	0	106	2	460
20-26	37	593	43	624	6	467	8	585	10	598	4	418	14	539	27	491	10	440	3	339	13	426	11	346	13	408	0	106	14	474
Oct. 27-Nov. 2	10	603	13	637	7	474	12	597	14	612	10	428	11	550	7	498	9	449	3	342	5	431	3	349	6	414	0	106	8	482
Nov. 3-9	4	607	8	645	4	478	10	607	6	618	7	435	7	557	0	498	2	451	0	342	0	431	0	349	0	414	0	106	4	486
10-16	21	628	29	674	17	495	16	623	22	640	7	442	18	575	20	518	6	457	4	346	11	442	7	356	10	424	0	106	14	500
17-23	26	654	50	724	23	518	29	652	36	676	23	465	32	607	26	544	28	485	8	354	23	465	6	362	18	442	0	106	25	525
Nov. 24-30	19	673	22	746	7	525	4	656	5	681	0	465	8	615	5	549	6	491	0	354	5	470	0	362	3	445	0	106	6	531
Dec. 1-7	38	711	29	775	26	551	29	685	29	710	12	477	25	640	26	575	24	515	10	364	29	499	15	377	21	466	0	106	23	554
8-14	40	751	43	818	52	603	66	751	59	769	52	529	54	694	32	607	41	556	39	403	33	532	41	418	37	503	19	125	45	599
15-21	1	752	8	826	20	625	11	762	23	792	7	536	14	708	0	607	12	568	2	405	0	532	0	418	3	506	0	125	9	608
Dec. 22-28	20	772	25	851	29	652	35	797	36	828	37	573	32	740	21	628	27	595	34	439	20	552	27	445	26	532	3	128	29	637

TABLE IV.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT BELOW 42° F. IN EACH DISTRICT FOR EACH OF THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands Generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	DAY-DEGREES BELOW 42° FAHRENHEIT.																													
1886.																														
Dec. 29, 1885, to Jan. 4, 1886	36	36	29	29	27	27	31	31	25	25	15	15	25	25	10	10	11	11	6	6	11	11	7	7	9	9	0	0	17	17
Jan. 5-11	63	99	73	102	71	98	75	106	72	97	57	72	70	95	57	67	54	65	39	45	36	47	35	42	44	53	20	20	57	74
12-18	55	154	50	152	39	137	46	152	39	136	39	111	43	138	38	105	31	96	35	80	33	80	32	74	34	87	7	27	39	113
19-25	42	196	66	218	67	204	74	226	78	214	62	173	69	207	64	169	71	167	67	147	57	137	64	138	65	152	28	55	67	180
Jan. 26-Feb. 1	41	236	44	262	48	252	41	267	38	252	29	202	40	247	39	208	37	204	34	181	39	176	32	170	36	188	7	62	38	218
Feb. 2-8	44	283	55	317	55	307	62	329	54	306	49	251	55	302	48	256	50	254	36	217	32	208	28	198	39	227	14	76	47	265
9-15	23	306	25	342	31	338	58	387	39	345	38	289	38	340	19	275	25	279	32	249	23	231	12	210	22	249	15	91	30	295
16-22	41	347	57	399	58	396	64	451	61	406	52	341	59	399	38	313	43	322	41	290	32	263	24	234	36	285	13	104	47	342
Feb. 23-Mar. 1	61	408	69	468	66	462	74	525	73	479	62	403	69	468	59	372	70	392	43	333	51	314	29	263	50	335	22	126	60	402
Mar. 2-8	68	476	68	536	71	533	72	597	79	558	61	464	70	538	65	437	73	465	57	390	53	367	50	313	60	395	27	153	65	467
9-15	42	518	67	603	66	599	69	666	75	633	63	527	68	606	57	494	71	536	61	451	51	418	41	354	56	451	41	194	62	529
16-22	23	541	29	632	22	621	18	684	18	651	28	555	23	629	15	509	21	557	11	462	10	428	8	362	13	464	4	198	18	547
23-29	4	545	0	632	0	621	0	684	0	651	0	555	0	629	0	509	0	557	0	462	0	428	0	362	0	464	0	198	0	547
Mar. 30-April 5	28	573	20	652	10	631	7	691	8	659	2	557	9	638	13	522	8	565	3	465	17	445	10	372	10	474	0	198	9	556
April 6-12	24	597	28	680	23	654	17	708	21	680	14	571	21	659	24	546	22	587	14	479	22	467	17	389	29	494	4	202	20	576
13-19	10	607	8	688	9	663	11	719	10	690	9	580	9	668	6	552	4	591	6	485	4	471	6	395	5	499	0	202	7	583
20-26	15	622	20	708	10	673	7	726	7	697	0	580	9	677	8	560	3	594	0	485	6	477	0	395	4	503	0	202	7	590
April 27-May 3	17	639	15	723	17	690	22	748	20	717	10	590	17	694	11	571	13	607	5	490	7	484	2	397	7	510	0	202	12	602
May 4-10	5	644	0	723	0	690	0	748	0	717	0	590	0	694	0	571	0	607	0	490	0	484	0	397	0	510	0	202	0	602
11-17	14	658	11	734	7	697	2	750	4	721	0	590	5	699	7	578	5	612	0	490	7	491	0	397	4	514	0	202	5	607
18-24	3	661	0	734	0	697	0	750	0	721	0	590	0	699	0	578	0	612	0	490	0	491	0	397	0	514	0	202	0	607
May 25-31	8	669	0	734	0	697	0	750	0	721	0	590	0	699	1	579	0	612	0	490	1	492	4	401	1	515	0	202	0	607
June 1-7	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
8-14	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
15-21	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
22-28	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
June 29-July 5	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
July 6-12	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
13-19	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
20-26	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
July 27-Aug. 2	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
Aug. 3-9	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
10-16	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
17-23	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
Aug. 24-30	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
Aug. 31-Sept. 6	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
Sept. 7-13	0	669	0	734	0	697	0	750	0	721	0	590	0	699	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	607
14-20	0	669	6	740	0	697	0	750	0	721	0	590	1	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	1	608
21-27	0	669	0	740	0	697	0	750	0	721	0	590	0	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	608
Sept. 28-Oct. 4	0	669	0	740	0	697	0	750	0	721	0	590	0	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	608
Oct. 5-11	0	669	0	740	0	697	0	750	0	721	0	590	0	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	608
12-18	0	669	0	740	0	697	0	750	0	721	0	590	0	700	0	579	0	612	0	490	0	492	0	401	0	515	0	202	0	608
19-25	0	669	3	743	0	697	0	750	0	721	0	590	1	701	0	579	0	612	0	490	3	495	0	401	1	516	0	202	1	609
Oct. 26-Nov. 1	0	669	0	743	0	697	0	750	0	721	0	590	0	701	0	579	0	612	0	490	0	495	0	401	0	516	0	202	0	609
Nov. 2-8	10	679	11	754	10	707	13	763	16	737	8	598	12	713	4	583	4	616	7	497	10	505	10	411	7	523	0	202	10	619
9-15	10	689	11	765	8	715	5	768	6	743	4	602	7	720	6	589	1	617	3	500	5	510	2	413	4	527	0	202	5	624
16-22	15	704	18	783	14	729	15	783	12	755	8	610	13	733	6	595	4	621	0	500	6	516	0	413	3	530	0	202	8	632
23-29	0	704	9	792	11	740	15	798	12	767	11	621	11	744	0	595	0	621	2	502	1	517	3	416	1	531	0	202	6	638
Nov. 30-Dec. 6	42	746	44	836	39	779	50	848	47	814	47	668	45	789	31	626	32	653	33	535	31	548	14	430	28	559	3	205	36	674
Dec. 7-13	37	783	30	866	28	807	26	874	25	839	8	676	23	812	28	654	22	675	9	544	29	577	15	445	21	580	0	205	22	696
14-20	69	852	76	942	63	870	61	935	68	907	40	716	62	874	73	727	62	737	40	584	61	638	62	507	60	640	7	212	61	757
21-27	51	903	60	1002	53	923	61	996	48	955	44	760	53	927	35	762	34	771	39	623	37	675	42	549	37	677	7	219	45	802
Dec. 28-Jan. 3, 1887	34	937	48	1050	61	984	76	1072	74	1029	64	824	65	992	30	792	52	823	39	662	28	703	24	573	34	711	15	234	50	852

TABLE V.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF HOURS OF BRIGHT SUNSHINE IN EACH DISTRICT, REGISTERED DURING THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.										Principal Grazing, &c. Districts.										Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Number of Hours of Bright Sunshine.																													
1885.																														
Dec. 30, 1884, to Jan. 5, 1885	1	1	2	2	0	0	4	4	1	1	0	0	2	2	3	3	0	0	2	2	5	5	8	8	4	4	2	2	3	3
Jan. 6-12	2	3	6	8	0	0	10	14	9	10	11	11	7	9	8	11	3	3	16	18	11	16	19	27	11	15	19	21	9	12
13-19	8	11	5	13	0	0	1	15	1	11	2	13	2	11	9	20	2	5	9	27	18	34	16	43	11	26	10	31	7	19
20-26	3	14	1	14	3	3	18	33	3	14	6	19	6	17	3	23	5	10	1	28	3	37	5	48	3	29	5	36	4	23
Jan. 27-Feb. 2	6	20	3	17	3	6	6	39	4	18	4	23	4	21	3	26	3	13	5	33	17	54	14	62	9	38	10	46	7	30
Feb. 3-9	13	33	7	24	3	9	19	58	14	32	18	41	12	33	9	35	8	21	17	50	11	65	20	82	13	51	23	69	12	42
10-16	10	43	24	48	1	10	4	62	6	38	4	45	8	41	11	46	3	24	1	51	18	83	10	92	8	59	10	79	8	50
17-23	18	61	31	79	12	22	20	82	22	60	19	64	21	62	19	65	15	39	21	72	27	110	27	119	22	81	24	103	22	72
Feb. 24-Mar. 2	14	75	18	97	14	36	16	98	19	79	17	81	17	79	19	84	20	59	15	87	16	126	18	137	18	99	17	120	17	89
Mar. 3-9	16	91	16	113	11	47	23	121	22	101	21	102	19	98	25	109	18	77	28	115	22	148	32	169	25	124	19	139	22	111
10-16	19	110	32	145	21	68	30	151	26	127	26	128	27	125	29	138	30	107	37	152	29	177	40	209	33	157	57	196	30	141
17-23	32	142	40	185	21	89	33	184	33	160	30	158	31	156	30	168	28	135	42	194	19	196	25	234	29	186	38	234	30	171
24-30	25	167	23	208	11	100	36	220	16	176	29	187	23	179	20	188	14	149	17	211	19	215	23	257	18	204	34	268	21	192
Mar. 31-April 6	34	201	39	247	27	127	44	264	39	215	47	234	39	218	39	227	40	189	43	254	32	247	40	297	39	243	53	321	39	231
April 7-13	51	252	21	268	2	129	10	274	6	221	15	249	11	229	31	258	16	205	26	280	26	273	32	329	26	269	33	354	19	250
14-20	42	294	55	323	26	155	54	328	47	268	49	298	46	275	44	302	41	246	52	332	35	308	35	364	41	310	61	415	43	293
21-27	36	330	33	356	20	175	52	380	42	310	47	345	39	314	28	330	29	275	41	373	22	330	23	387	29	339	51	466	34	327
April 28-May 4	36	366	22	378	25	200	36	416	30	340	40	385	31	345	28	358	29	304	40	413	31	361	39	426	33	372	55	521	32	359
May 5-11	47	413	48	426	48	248	47	463	46	386	43	428	46	391	48	406	50	354	56	469	54	415	60	486	54	426	75	596	50	409
12-18	42	455	38	464	41	289	56	519	45	431	50	478	46	437	38	444	46	400	51	520	42	457	44	530	44	470	69	665	45	454
19-25	35	490	30	494	33	322	29	548	37	468	37	515	33	470	32	476	29	429	32	552	33	490	34	564	32	502	46	711	32	486
May 26-June 1	11	501	47	541	34	356	49	597	48	516	47	562	45	515	40	516	40	469	32	584	44	534	36	600	38	540	40	751	42	528
June 2-8	49	550	46	587	40	396	57	654	50	566	55	617	49	564	28	544	42	511	39	623	32	566	33	633	35	575	62	813	42	570
9-15	51	601	47	634	62	458	70	724	66	632	75	692	64	628	67	611	68	579	74	697	53	619	65	698	65	640	76	889	64	634
16-22	14	615	33	667	30	488	39	763	35	667	39	731	35	663	18	629	16	595	28	725	23	642	28	726	23	663	48	937	29	663
23-29	45	660	56	723	28	516	34	797	43	710	40	771	40	703	54	683	46	641	49	774	48	690	68	794	53	716	13	950	47	710
June 30-July 6	17	677	61	784	56	572	66	863	64	774	57	828	61	764	46	729	54	695	56	830	21	711	22	816	40	756	57	1007	50	760
July 7-13	29	706	52	836	46	618	51	914	56	830	56	884	52	816	40	769	58	753	58	888	30	741	39	855	45	801	66	1073	49	809
14-20	21	727	33	869	18	636	28	942	28	858	34	918	28	844	29	798	24	777	28	916	22	763	17	872	24	825	43	1116	26	835
21-27	36	763	37	906	40	676	73	1015	57	915	72	990	56	900	49	847	45	822	61	977	26	789	46	918	45	870	83	1199	50	885
July 28-Aug. 3	52	815	47	953	18	694	9	1024	37	952	36	1026	29	929	58	905	63	885	55	1032	73	862	70	988	64	934	72	1271	47	932
Aug. 4-10	16	831	18	971	16	710	26	1050	30	982	39	1065	26	955	27	932	22	907	38	1070	15	877	27	1015	26	960	58	1329	26	958
11-17	40	871	42	1013	18	728	64	1114	61	1043	66	1131	50	1005	48	980	50	957	64	1134	37	914	54	1069	50	1010	79	1408	50	1008
18-24	37	908	41	1054	14	742	24	1138	32	1075	23	1154	27	1032	45	1025	42	999	69	1203	43	957	67	1136	53	1063	74	1482	40	1048
Aug. 25-31	57	965	41	1095	8	750	26	1164	21	1096	34	1188	26	1058	12	1037	15	1014	29	1232	7	964	17	1153	16	1079	28	1510	21	1069
Sept. 1-7	24	989	39	1134	25	775	35	1199	29	1125	37	1225	33	1091	25	1062	27	1041	42	1274	16	980	34	1187	29	1108	47	1557	31	1100
8-14	22	1011	35	1169	27	802	28	1227	28	1153	24	1249	28	1119	29	1091	30	1071	24	1298	27	1007	34	1221	29	1137	43	1600	28	1128
15-21	28	1039	33	1202	41	843	35	1262	38	1191	30	1279	36	1155	27	1118	33	1104	35	1333	18	1025	23	1244	27	1164	32	1632	31	1159
22-28	24	1063	33	1235	40	883	42	1304	32	1223	34	1313	36	1191	38	1156	37	1141	31	1364	31	1056	35	1279	34	1198	40	1672	35	1194
Sept. 29-Oct. 5	25	1088	23	1258	28	911	23	1327	20	1243	19	1332	23	1214	28	1184	24	1165	21	1385	25	1081	30	1309	26	1224	11	1683	24	1218
Oct. 6-12	26	1114	32	1290	22	933	23	1350	30	1273	25	1357	26	1240	33	1217	23	1188	30	1415	31	1112	35	1344	30	1254	24	1707	28	1246
13-19	22	1136	13	1303	5	938	16	1366	18	1291	24	1381	15	1255	15	1232	7	1195	30	1445	12	1124	18	1362	16	1270	42	1749	16	1262
20-26	28	1164	29	1332	7	945	15	1381	10	1301	10	1391	14	1269	18	1250	10	1205	8	1453	19	1143	14	1376	14	1284	11	1760	14	1276
Oct. 27-Nov. 2	8	1172	14	1346	7	952	25	1406	22	1323	25	1416	19	1288	14	1264	12	1217	24	1477	16	1159	19	1395	17	1301	28	1788	18	1294
Nov. 3-9	7	1179	17	1363	6	958	9	1415	5	1328	7	1423	9	1297	8	1272	6	1223	16	1493	10	1169	13	1408	11	1312	7	1795	10	1304
10-16	5	1184	8	1371	5	963	10	1425	12	1340	13	1436	9	1306	9	1281	13	1236	14	1507	15	1184	15	1423	13	1325	22	1817	11	1315
17-23	5	1189	12	1383	7	970	23	1448	12	1352	10	1446	13	1319	10	1291	13	1249	8	1515	15	1199	12	1435	11	1336	9	1826	12	1327
Nov. 24-30	14	1203	6	1389	5	975	2	1450	3	1355	2	1448	4	1323	6	1297	5	1254	4	1519	10	1209	9	1444	7	1343	2	1828	5	1332
Dec. 1-7	11	1214	21	1410	13	988	21	1471	10	1365	12	1460	15	1338	10	1307	11	1265	10	1529	12	1221	10	1454	11	1354	18	1846	13	1345
8-14	5	1219	11	1421	8	996	13	1484	12	1377	17	1477	12	1350	9	1316	11	1276	20	1549	11	1232	16	1470	13	1367	17	1863	13	1358
15-21	4	1223	10	1431	6	1002	5	1489	5	1382	4	1481	6	1356	0	1316	7	1283	5	1554	2	1234	6	1476	4	1371	5	1868	5	1363
Dec. 22-28	0	1223	10	1441	4	1006	10	1499	3	1385	9	1490	7	1363	6	1322	4	1287	8	1562	8	1242	9	1485	7	1378	15	1883	7	1370

TABLE V.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF HOURS OF BRIGHT SUNSHINE IN EACH DISTRICT REGISTERED DURING THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	Number of Hours of Bright Sunshine.																													
1886.																														
Dec. 29, 1885, to Jan. 4, 1886	4	4	12	12	4	4	11	11	5	5	6	6	8	8	4	4	3	3	4	4	4	4	5	5	4	4	5	5	6	6
Jan. 5-11	7	11	9	21	10	14	17	28	15	20	17	23	14	22	19	23	12	15	16	20	9	13	11	16	13	17	19	24	14	20
12-18	2	13	16	37	14	28	15	43	19	39	19	42	16	38	9	32	10	25	17	37	4	17	9	25	10	27	22	46	13	33
19-25	5	18	4	41	3	31	11	54	7	46	8	50	6	44	3	35	8	33	12	49	8	25	14	39	9	36	13	59	7	40
Jan. 26-Feb. 1	9	27	15	56	9	40	22	76	14	60	15	65	15	59	8	43	7	40	18	67	10	35	16	55	12	48	18	77	14	54
Feb. 2-8	16	43	29	85	18	58	24	100	13	73	16	81	20	79	12	55	17	57	15	82	10	45	11	66	13	61	33	110	16	70
9-15	15	58	17	102	14	72	9	109	12	85	11	92	13	92	6	61	13	70	12	94	19	64	22	88	14	75	14	124	14	84
16-22	29	87	11	113	1	73	4	113	3	88	3	95	4	96	3	64	1	71	7	101	14	78	11	99	7	82	9	133	5	89
Feb. 23-Mar. 1	30	117	8	121	19	92	11	124	14	102	7	102	12	108	16	80	18	89	9	110	8	86	11	110	12	94	12	145	12	101
Mar. 2-8	16	133	21	142	28	120	19	143	29	131	28	130	25	133	23	103	29	118	26	136	19	105	33	143	26	120	28	173	26	127
9-15	46	179	25	167	20	140	32	175	23	154	27	157	25	158	29	132	29	147	28	164	22	127	27	170	27	147	56	229	26	153
16-22	5	184	11	178	9	149	9	184	9	163	11	168	10	168	2	134	4	151	8	172	3	130	14	184	6	153	5	234	8	161
23-29	21	205	15	193	18	167	14	198	10	173	12	180	14	182	16	150	20	171	14	186	13	143	19	203	17	170	28	262	15	176
Mar. 30-April 5	33	238	44	237	31	198	30	228	32	205	27	207	33	215	25	175	18	189	29	215	21	164	19	222	23	193	39	301	28	204
April 6-12	29	267	42	279	30	228	43	271	32	237	34	241	36	251	36	211	31	220	44	259	31	195	39	261	36	229	45	346	36	240
13-19	37	304	16	295	18	246	19	290	16	253	22	263	18	269	34	245	22	242	20	279	27	222	31	292	27	256	24	370	23	263
20-26	67	371	53	348	30	276	37	327	37	290	50	313	42	311	46	291	46	288	46	325	49	271	44	336	46	302	57	427	44	307
April 27-May 3	41	412	43	391	45	321	60	387	51	341	61	374	52	363	45	336	44	332	52	377	49	320	38	374	46	348	57	484	49	356
May 4-10	28	440	21	412	22	343	44	431	45	386	57	431	38	401	15	351	28	360	52	429	9	329	18	387	23	371	69	553	30	386
11-17	61	501	40	452	15	358	14	445	15	401	19	450	21	422	29	380	22	382	26	455	23	352	23	410	25	396	30	583	23	409
18-24	42	543	44	496	18	376	36	481	12	413	27	477	27	449	38	418	27	409	27	482	49	401	45	455	37	433	21	604	32	441
May 25-31	26	569	31	527	29	405	57	538	42	455	49	526	42	491	32	450	42	451	50	541	36	437	57	512	45	478	53	657	44	485
June 1-7	41	610	55	582	39	444	63	601	41	496	60	586	52	543	40	490	36	487	36	577	16	453	15	527	29	507	47	704	40	525
8-14	24	634	24	606	26	470	40	641	32	528	41	627	32	575	26	516	31	518	43	620	24	477	29	556	31	538	36	740	32	557
15-21	44	678	50	656	33	503	16	657	24	552	39	666	32	607	49	565	38	556	57	677	53	530	54	610	50	588	72	812	41	598
22-28	46	724	60	716	42	545	56	713	46	598	62	728	53	660	35	600	40	596	60	737	31	561	42	652	41	629	76	888	47	645
June 29-July 5	25	749	41	757	65	610	83	796	78	676	87	815	71	731	70	670	75	671	90	827	58	619	81	733	75	704	99	987	73	718
July 6-12	41	790	53	810	42	652	41	837	40	716	49	864	45	776	43	713	46	717	49	876	23	642	28	761	38	742	68	1055	42	760
13-19	36	826	50	860	32	684	48	885	38	754	51	915	44	820	37	750	34	751	46	922	29	671	29	790	35	777	55	1110	39	799
20-26	34	860	35	895	35	719	49	934	34	788	42	957	39	859	30	780	30	781	34	956	18	689	33	823	29	806	39	1149	34	833
July 27-Aug. 2	22	882	40	935	29	748	22	956	28	816	32	989	30	889	44	824	43	824	37	993	23	712	29	852	35	841	44	1193	33	866
Aug. 3-9	34	916	43	978	41	789	38	994	39	855	31	1020	38	927	34	858	41	865	25	1018	20	732	24	876	29	870	47	1240	33	899
10-16	29	945	29	1007	35	824	42	1036	38	893	44	1064	38	965	22	880	35	900	39	1057	26	758	40	916	33	903	56	1296	36	935
17-23	36	981	36	1043	18	842	42	1078	29	922	35	1099	32	997	30	910	30	930	35	1092	22	780	14	930	26	929	43	1339	29	964
Aug. 24-30	13	994	37	1080	40	882	56	1134	41	963	50	1149	45	1042	21	931	31	961	35	1127	20	800	19	949	25	954	47	1386	35	999
Aug. 31-Sept. 6	34	1028	37	1117	30	912	44	1178	24	987	43	1192	36	1078	25	956	23	984	14	1141	24	824	28	977	23	977	30	1416	29	1028
Sept. 7-13	27	1055	21	1138	21	933	45	1223	30	1017	37	1229	31	1109	19	975	18	1002	29	1170	23	847	19	996	22	999	41	1457	27	1055
14-20	42	1097	34	1172	23	956	52	1275	47	1064	49	1278	41	1150	41	1016	46	1048	41	1211	48	895	48	1044	45	1044	65	1522	43	1098
21-27	24	1121	29	1201	13	969	14	1289	18	1082	14	1292	17	1167	21	1037	16	1064	24	1235	20	915	24	1068	21	1065	28	1550	19	1117
Sept. 28-Oct. 4	21	1142	20	1221	26	995	37	1326	26	1108	36	1328	29	1196	12	1049	20	1084	27	1262	12	927	11	1079	16	1081	39	1589	23	1140
Oct. 5-11	15	1157	17	1238	15	1010	27	1353	18	1126	27	1355	21	1217	17	1066	18	1102	25	1287	8	935	19	1098	18	1099	32	1621	19	1159
12-18	22	1179	9	1247	13	1023	20	1373	8	1134	15	1370	13	1230	18	1084	10	1112	16	1303	17	952	15	1113	15	1114	15	1636	14	1173
19-25	38	1217	9	1256	16	1039	19	1392	14	1148	14	1384	14	1244	22	1106	22	1134	13	1316	25	977	21	1134	20	1134	17	1653	17	1190
Oct. 26-Nov. 1	24	1241	6	1262	7	1046	6	1398	9	1157	10	1394	8	1252	13	1119	15	1149	15	1331	19	996	21	1155	17	1151	28	1681	13	1203
Nov. 2-8	11	1252	23	1285	16	1062	23	1421	15	1172	17	1411	19	1271	17	1136	16	1165	17	1348	23	1019	24	1179	19	1170	16	1697	19	1222
9-15	9	1261	4	1289	14	1076	12	1433	5	1177	5	1416	8	1279	8	1144	9	1174	12	1360	13	1032	15	1194	11	1181	9	1706	9	1231
16-22	10	1271	22	1311	21	1097	11	1444	13	1190	16	1432	17	1296	29	1164	20	1194	9	1369	12	1044	12	1206	15	1196	25	1731	16	1247
23-29	6	1277	18	1329	17	1114	16	1460	8	1198	9	1441	13	1309	8	1172	3	1197	9	1378	9	1053	12	1218	8	1204	10	1741	10	1257
Nov. 30-Dec. 6	8	1285	15	1344	24	1138	15	1475	17	1215	20	1461	18	1327	16	1188	16	1213	17	1395	9	1062	11	1229	14	1218	17	1758	16	1273
Dec. 7-13	1	1286	9	1353	16	1154	16	1491	13	1228	14	1475	14	1341	12	1200	9	1222	15	1410	9	1071	12	1241	11	1229	14	1772	13	1286
14-20	7	1293	7	1360	14	1168	15	1506	12	1240	15	1490	13	1354	17	1217	14	1236	21	1431	10	1081	21	1262	16	1245	19	1791	14	1300
21-27	9	1302	8	1368	14	1182	9	1515	15	1255	14	1504	12	1366	9	1226	11	1247	18	1449	8	1089	13	1275	12	1257	17	1808	12	1312
Dec. 28-Jan. 3, 1887	7	1309	9	1377	12	1194	16	1531	10	1265	15	1519	12	1378	6	1232	5	1252	15	1464	8	1097	5	1280	8	1265	21	1829	10	1322

TABLE VI.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES FOR THE PERCENTAGE OF THE POSSIBLE AMOUNT OF BRIGHT SUNSHINE IN EACH DISTRICT, WHICH WAS ACTUALLY RECORDED DURING THE YEARS 1885 AND 1886.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.														Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat Producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.							
	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.	Weekly.	Since Dec. 30.
	Percentages of Possible Duration.																															
1885.																																
Dec. 30, 1884, to Jan. 5, 1885	2	2	4	4	0	0	7	7	1	1	0	0	2	2	5	5	0	0	4	4	10	10	14	14	7	7	3	3	5	5
Jan. 6-12	4	3	12	8	0	0	19	13	17	9	19	10	13	8	15	10	6	3	27	16	21	16	34	24	21	14	33	18	17	11
13-19	16	8	10	9	0	0	2	9	2	7	3	8	3	7	17	13	3	3	16	12	32	16	28	26	19	14	17	18	11	11
20-26	6	7	2	7	5	1	31	15	4	6	9	8	10	7	5	11	9	5	2	12	5	17	8	22	6	13	8	15	8	10
Jan. 27-Feb. 2	11	8	5	7	5	2	10	14	7	6	6	8	7	7	5	10	4	4	8	12	28	20	22	22	13	14	16	15	10	11
Feb. 3-9	22	11	12	8	5	2	29	17	21	9	27	12	19	10	15	11	12	6	27	14	18	19	32	24	21	15	34	19	20	12
10-16	16	12	38	13	2	2	6	15	8	9	6	11	12	10	17	12	5	6	1	12	27	20	15	22	13	14	14	18	13	12
17-23	27	14	46	18	17	5	28	17	30	12	27	13	30	13	28	14	22	8	30	14	38	23	38	25	31	17	33	20	31	15
Feb. 24-Mar. 2	20	15	25	19	19	7	22	17	26	14	23	14	23	14	23	16	28	11	20	15	22	23	24	25	24	18	23	20	23	16
Mar. 3-9	21	16	21	19	14	8	30	19	28	16	27	16	24	16	32	18	24	12	36	18	28	24	42	27	32	20	24	21	28	18
10-16	24	17	40	21	26	10	37	21	33	18	32	18	34	18	37	20	37	15	46	21	36	25	49	29	41	22	70	26	38	20
17-23	38	19	48	24	25	11	40	23	39	20	36	19	38	19	35	22	34	17	50	24	23	25	29	29	34	23	45	28	36	21
24-30	28	20	26	25	13	11	42	25	18	20	34	21	27	20	23	22	16	17	19	23	21	25	27	29	21	23	39	29	24	22
Mar. 31-April 6	37	22	42	26	30	13	49	27	43	22	52	24	43	22	43	24	44	20	48	26	35	26	44	30	43	25	59	32	43	24
April 7-13	53	25	22	26	2	12	10	26	6	21	16	23	11	22	33	24	17	19	28	26	27	26	34	30	28	25	35	32	20	23
14-20	42	26	55	28	27	13	56	28	48	23	51	26	47	24	45	25	42	21	54	28	36	27	36	31	43	26	64	35	45	25
21-27	35	27	32	29	20	14	52	30	42	24	47	27	39	25	27	26	29	22	41	29	22	26	23	31	28	27	52	36	33	26
April 28-May 4	33	27	20	28	24	15	35	30	29	25	39	28	29	25	26	26	27	22	38	30	29	26	37	31	31	27	54	37	30	26
May 5-11	42	28	44	29	44	17	44	31	43	26	41	29	43	26	45	28	46	24	54	31	50	28	56	33	50	29	72	39	47	28
12-18	37	29	33	30	37	18	52	33	41	27	47	30	42	28	35	28	41	25	47	33	38	29	40	33	40	30	66	41	41	29
19-25	30	29	26	29	29	19	26	32	33	27	33	30	29	27	28	28	26	25	29	32	29	29	30	33	29	29	43	42	29	28
May 26-June 1	9	28	39	30	30	20	45	33	43	28	43	31	40	28	34	28	35	26	29	32	38	29	32	33	34	29	37	41	37	29
June 2-8	40	29	38	30	34	21	50	34	44	29	48	32	43	29	24	28	37	26	34	32	27	29	28	33	30	30	56	42	37	30
9-15	41	29	39	31	53	22	61	35	57	31	66	34	55	31	54	30	58	28	65	34	45	30	56	34	55	31	68	43	55	31
16-22	11	28	27	31	25	23	34	35	30	31	34	34	30	31	15	29	14	28	24	34	19	30	24	34	19	31	48	43	24	31
23-29	36	29	46	31	24	23	28	35	37	31	36	34	34	31	45	30	39	28	43	34	41	30	59	35	45	31	12	42	40	31
June 30-July 6	14	28	50	32	48	24	58	36	56	32	51	35	52	32	39	30	46	29	50	35	18	30	19	34	34	32	51	42	43	32
July 7-13	24	28	43	33	40	25	45	37	50	33	50	35	46	33	34	30	50	30	52	36	26	29	34	34	39	32	60	43	42	33
14-20	18	27	28	33	16	24	25	36	25	33	31	35	25	32	25	30	21	30	25	35	19	29	15	33	21	31	40	43	23	32
21-27	31	27	32	33	36	25	66	37	52	34	64	36	50	33	44	31	40	30	56	36	22	29	41	34	41	32	78	44	46	33
July 28-Aug. 3	46	28	42	33	17	24	9	36	35	34	34	36	27	33	53	32	58	31	52	37	67	30	65	35	59	33	69	45	43	33
Aug. 4-10	15	28	17	32	15	24	25	36	28	33	38	36	25	32	25	31	20	31	37	37	14	30	26	34	24	33	56	46	25	33
11-17	37	28	40	33	18	24	61	36	60	34	65	37	49	33	46	32	48	31	63	37	36	30	53	35	49	33	79	47	49	33
18-24	36	28	40	33	14	23	24	36	32	34	24	37	27	33	44	32	43	32	70	39	43	30	68	36	54	34	76	48	40	34
Aug. 25-31	58	29	42	33	8	23	27	36	22	34	35	37	27	33	12	32	16	31	31	38	7	30	18	36	17	33	29	47	22	33
Sept. 1-7	25	29	41	33	27	23	38	37	31	34	38	37	35	33	26	32	29	31	46	38	17	29	36	36	31	33	52	47	33	33
8-14	24	29	39	34	30	23	31	36	31	33	28	37	32	33	32	32	34	31	27	38	30	29	38	36	32	33	48	47	32	33
15-21	32	29	38	34	48	24	40	36	44	34	34	37	41	33	31	32	38	31	40	38	20	29	27	35	31	33	37	47	36	33
22-28	29	29	40	34	48	25	50	36	38	34	40	37	43	33	46	32	45	32	38	38	37	29	42	36	41	33	48	47	42	33
Sept. 29-Oct. 5	32	29	29	34	35	25	29	36	25	34	24	36	28	33	36	32	28	32	26	38	31	29	37	36	32	33	14	46	30	33
Oct. 6-12	35	29	43	34	29	25	30	36	39	34	32	36	35	33	44	32	31	32	37	38	41	30	46	36	40	34	31	46	38	34
13-19	31	29	18	34	7	24	22	36	25	34	32	36	21	33	20	32	10	31	41	38	17	29	24	36	22	33	57	46	22	33
20-26	42	29	43	34	10	24	21	36	14	33	14	36	20	33	26	32	15	31	11	38	27	29	21	35	20	33	15	46	20	33
Oct. 27-Nov. 2	13	28	22	33	11	24	37	36	33	33	37	36	28	32	21	34	19	30	35	37	24	29	28	35	25	33	41	45	27	33
Nov. 3-9	12	29	30	34	9	24	14	35	12	33	11	36	15	32	14	31	10	30	25	37	16	29	20	35	17	32	11	45	16	32
10-16	9	29	14	33	9	23	17	35	20	33	21	35	16	32	15	31	21	30	23	37	25	29	25	35	22	33	34	45	19	33
17-23	10	28	23	33	12	23	40	35	21	33	16	35	22	32	17	31	23	30	13	37	26	29	21	35	20	32	15	44	21	32
Nov. 24-30	29	29	12	33	10	23	4	35	5	32	3	35	7	32	11	31	9	30	7	36	19	29	17	34	13	32	3	44	10	32
Dec. 1-7	24	28	44	33	26	23	39	35	19	32	21	34	30	31	19	31	23	30	18	36	23	29	19	34	20	32	31	44	25	32
8-14	11	28	22	33	15	23	26	35	23	32	31	34	23	31	17	31	21	30	36	36	21	29	31	34	25	32	30	43	24	32
15-21	9	28	22	33	12	23	10	34	9	32	8	34	12	31	0	30	15	30	9	36	3	28	12	34	8	32	9	43	10	32
Dec. 22-28	0	28	22	33	8	23	18	34	6	31	16	34	14	31	13	30	8	29	15	36	16	28	17	34	14	31	27	43	14	31

TABLE VI.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES FOR THE PERCENTAGES OF THE POSSIBLE DURATION OF BRIGHT SUNSHINE IN EACH DISTRICT WHICH WAS ACTUALLY RECORDED DURING THE YEARS 1885 AND 1886—(*continued*).

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.	Weekly.	Since Dec. 29.
	Percentages of Possible Duration.																													
1886.																														
Dec. 29, 1885 to Jan. 4, 1886	9	9	26	26	8	8	21	21	10	10	11	11	15	15	9	9	5	5	7	7	7	7	10	10	8	8	9	9	12	12
Jan. 5-11	15	12	19	22	19	14	32	26	27	19	30	21	26	20	37	23	23	15	29	18	17	13	20	15	25	17	33	21	25	19
12-18	4	9	32	26	26	18	26	26	34	24	33	25	30	24	17	21	19	16	27	22	8	11	17	15	18	17	37	26	24	20
19-25	10	9	8	21	6	15	18	24	11	21	14	22	11	21	5	17	14	15	19	21	13	12	24	18	15	17	21	25	13	19
Jan. 26-Feb. 1	16	11	27	22	16	15	36	27	24	21	24	22	25	21	13	16	12	15	29	23	16	13	26	19	19	17	28	25	22	19
Feb. 2-8	27	14	48	27	29	17	37	29	20	21	25	23	32	23	19	17	27	17	24	23	15	13	17	19	21	18	50	30	27	21
9-15	24	16	27	27	21	18	14	26	18	21	16	22	19	23	10	15	20	17	17	22	29	16	32	21	22	18	20	28	21	20
16-22	43	20	16	25	1	16	6	23	4	18	4	19	6	20	4	14	1	15	10	20	21	17	15	21	10	17	13	26	8	19
Feb. 23-Mar. 1	42	23	11	23	27	17	15	22	19	18	10	18	16	20	22	15	24	16	12	19	11	16	15	20	17	17	16	25	17	19
Mar. 2-8	21	23	28	24	37	19	24	23	37	21	37	20	33	21	30	17	38	19	34	21	25	17	43	23	34	19	36	26	33	20
9-15	58	27	32	25	25	20	40	25	29	22	34	22	32	23	37	19	37	21	35	23	27	18	34	24	34	21	69	31	33	22
16-22	6	25	13	24	11	19	10	23	11	20	13	21	12	21	3	18	4	19	9	21	3	17	17	23	7	20	6	28	10	20
23-29	24	25	17	23	21	19	16	22	11	20	14	20	16	21	18	17	23	20	16	21	14	16	22	23	19	19	32	29	17	20
Mar. 30-April 5	36	26	48	25	34	21	34	23	36	21	30	21	36	22	28	18	20	20	32	22	23	17	21	23	25	20	43	30	31	21
April 6-12	30	26	44	27	32	22	47	25	35	22	36	22	39	24	38	20	33	21	47	24	33	18	42	24	39	21	48	32	39	23
13-19	37	27	16	26	18	21	20	25	16	22	23	22	19	23	35	21	23	21	21	24	27	20	32	25	28	22	25	31	24	22
20-26	64	30	51	28	30	22	37	26	37	23	51	25	41	25	45	23	46	23	46	26	48	22	44	27	46	24	58	33	44	25
April 27-May 3	38	31	40	29	43	24	59	28	50	25	60	27	50	27	43	25	43	24	51	27	47	24	37	27	44	25	56	35	47	26
May 4-10	25	31	19	28	21	23	42	29	43	26	54	29	36	27	14	24	27	25	50	29	8	22	12	26	22	25	67	37	29	26
11-17	54	32	35	29	13	23	13	28	14	25	17	28	18	27	26	24	20	24	24	28	21	22	21	26	23	25	29	37	21	26
18-24	36	32	38	30	16	22	33	28	11	24	25	28	25	26	33	25	24	24	25	28	43	24	41	27	33	26	20	35	29	26
May 25-31	22	32	26	29	25	22	51	30	37	25	44	29	37	27	28	25	37	25	53	30	32	24	51	28	40	26	49	36	39	27
June 1-7	34	32	45	30	33	23	55	31	36	26	53	30	44	28	34	26	31	26	32	30	14	24	13	27	25	27	42	37	35	27
8-14	19	31	20	30	22	23	34	32	28	26	36	31	28	28	22	25	27	25	38	30	21	23	25	27	27	26	32	36	27	27
15-21	35	31	41	30	28	23	14	31	21	26	34	31	28	28	41	26	33	26	50	32	45	25	46	28	43	27	64	38	35	28
22-28	37	32	49	31	35	24	49	31	39	26	54	32	45	29	29	26	34	26	53	33	26	25	36	29	36	28	68	39	41	29
June 29-July 5	20	31	34	31	55	26	72	33	67	28	77	34	61	30	59	28	64	28	86	36	50	26	70	31	65	30	89	42	63	30
July 6-12	34	31	44	32	36	26	36	34	35	29	43	35	39	31	37	28	40	29	44	35	20	26	24	31	33	30	62	43	36	31
13-19	30	31	42	33	28	26	42	34	34	29	46	35	38	31	32	29	30	29	42	36	26	26	26	30	31	30	51	43	35	31
20-26	29	31	30	32	31	26	44	34	31	29	39	35	35	31	27	28	27	29	31	35	16	25	30	30	26	29	36	43	31	30
July 27-Aug. 2	19	31	35	33	26	26	20	34	26	29	30	35	27	31	40	29	39	29	35	35	21	25	27	30	33	30	42	43	30	31
Aug. 3-9	31	31	39	33	39	27	36	34	37	29	30	35	36	32	32	29	37	29	24	35	19	25	23	30	27	30	46	43	32	31
10-16	27	30	27	33	34	27	41	34	37	29	43	35	36	32	21	29	34	29	38	35	25	25	39	30	31	29	55	43	34	31
17-23	35	31	35	33	18	27	42	34	29	29	35	35	32	32	30	29	30	29	35	35	22	25	14	30	26	29	44	43	29	31
Aug. 24-30	13	30	37	33	41	27	59	35	42	30	52	36	46	32	22	29	31	30	37	35	21	25	20	29	26	29	49	43	36	31
Aug. 31-Sept. 6	36	30	39	33	32	27	47	35	26	30	46	36	38	32	26	28	25	29	15	35	26	25	30	29	24	29	33	43	31	31
Sept. 7-13	30	31	23	33	24	27	50	36	33	30	41	36	34	32	21	28	20	29	33	35	26	25	21	29	24	29	46	43	29	31
14-20	48	31	39	33	27	27	60	36	54	30	57	37	47	33	47	29	54	30	48	35	56	25	55	30	52	30	76	44	50	31
21-27	29	31	35	33	15	27	17	36	21	30	17	36	21	32	25	29	20	30	30	35	24	25	29	30	26	30	33	44	24	31
Sept. 28-Oct. 4	27	30	25	33	33	29	47	36	32	30	45	36	36	33	15	28	25	29	33	35	15	25	13	29	20	29	48	44	28	31
Oct. 5-11	20	30	23	33	20	27	35	36	24	30	35	36	27	32	22	28	23	29	32	35	11	25	25	29	22	29	41	44	25	31
12-18	31	30	13	32	18	27	23	36	11	30	20	36	18	32	25	28	13	29	22	34	23	25	21	29	21	29	20	43	19	30
19-25	57	31	13	32	23	27	28	36	20	30	20	36	21	32	32	28	32	29	19	34	37	25	30	29	30	29	24	43	26	31
Oct. 26-Nov. 1	38	31	9	32	11	26	9	35	13	29	15	35	11	31	20	28	22	29	23	34	28	25	31	29	25	29	41	43	18	30
Nov. 2-8	19	31	38	32	25	26	36	35	23	29	26	35	30	31	28	28	26	29	27	34	36	25	39	29	31	29	24	43	31	30
9-15	16	30	7	31	23	26	20	35	8	29	8	35	13	31	14	28	15	29	19	33	21	25	25	29	19	29	14	42	16	30
16-22	19	30	42	31	37	27	20	35	23	29	27	35	30	31	35	28	35	29	16	33	20	25	20	29	25	29	40	42	28	30
23-29	12	30	36	31	31	26	29	35	14	29	15	34	25	31	15	28	6	28	16	33	16	25	21	29	15	29	17	42	20	30
Nov. 30-Dec. 6	17	30	31	31	47	27	28	35	32	29	36	34	35	31	32	28	30	29	30	33	16	25	20	29	26	29	29	42	31	30
Dec. 7-13	2	30	20	31	32	27	30	35	25	29	26	34	27	31	23	28	18	28	27	33	17	25	23	29	22	29	25	41	25	30
14-20	16	30	37	31	27	27	29	35	24	29	28	34	29	31	34	28	28	28	39	33	20	25	40	29	32	29	34	41	30	30
21-27	20	29	17	31	28	27	17	34	30	29	26	34	24	31	17	28	22	28	32	33	16	25	26	29	23	29	30	41	24	30
Dec. 28-Jan. 3, 1887	16	29	20	31	23	27	31	34	19	28	27	34	24	31	12	28	10	28	26	33	15	25	10	29	17	29	37	41	21	30

WEEKLY WEATHER REPORT, 1886.

VOL. III. APPENDIX III.] [*Price* 1*s*.
New Series.

TABLE I.—SHOWING FOR EACH DISTRICT, DURING THE EIGHT YEARS 1878–85, THE MEAN AGGREGATE NUMBERS OF RAINY DAYS FROM THE BEGINNING OF THE YEAR TO THE END OF EACH WEEK IN THE YEAR.

NUMBERS OF WEEKS.		Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.							
	0. SCOTLAND, N.	1. SCOTLAND, E.	2. ENGLAND, N.E.	3. ENGLAND, E.	4. MIDLAND COUNTIES.	5. ENGLAND, S.	MEANS FOR WHEAT-PRODUCING DISTRICTS.	6. SCOTLAND, W.	7. ENGLAND, N.W.	8. ENGLAND, S.W.	9. IRELAND, N.	10. IRELAND, S.	MEANS FOR GRAZING, &C. DISTRICTS.	CHANNEL ISLANDS.	MEANS FOR THE BRITISH ISLANDS GENERALLY.
	NUMBERS OF DAYS WITH RAIN.														
1	5	3	3	4	4	4	4	4	4	5	5	5	5	5	5
2	10	6	7	8	7	7	7	8	7	8	9	8	8	9	8
3	15	9	9	10	9	9	9	11	10	11	14	12	12	12	11
4	19	12	13	14	13	13	13	15	14	15	17	16	15	16	14
5	24	16	17	18	16	16	17	20	18	19	22	21	20	20	19
6	29	20	21	22	21	21	21	26	23	24	27	26	25	26	23
7	34	24	25	26	26	26	25	31	27	29	32	32	30	32	28
8	39	28	29	30	30	30	29	35	31	33	37	36	34	37	32
9	44	32	33	35	34	34	34	40	36	38	42	41	39	41	37
10	50	36	36	38	37	36	37	45	40	42	47	45	44	46	41
11	54	39	39	40	38	38	39	48	43	44	51	48	47	48	43
12	59	43	42	43	41	41	42	52	46	47	55	52	50	52	46
13	63	46	45	46	44	43	45	55	48	51	59	55	54	57	50
14	66	49	48	48	47	46	48	58	51	55	63	59	57	60	53
15	69	53	52	52	50	49	51	61	55	58	66	63	61	64	56
16	73	56	55	57	54	53	55	65	58	61	70	66	64	68	60
17	76	60	59	61	58	57	59	68	62	66	74	71	68	73	64
18	80	64	63	65	61	60	63	72	65	69	78	74	72	76	68
19	85	67	67	69	65	64	66	75	68	73	82	78	75	79	71
20	89	71	70	72	68	66	69	79	72	75	86	82	79	82	74
21	93	74	73	75	72	71	73	83	75	79	91	86	83	86	78
22	97	77	76	78	75	72	76	87	78	83	94	89	86	90	81
23	101	80	80	82	79	77	80	90	82	87	98	94	90	94	85
24	104	84	83	85	83	80	83	93	85	91	102	98	94	98	89
25	108	88	87	89	87	84	87	97	89	95	107	102	98	103	93
26	111	91	90	91	90	86	90	101	92	98	112	106	102	106	96
27	116	96	93	95	94	90	94	106	97	103	117	111	107	111	101
28	120	100	97	99	98	94	98	111	101	107	122	116	111	115	105
29	125	104	101	103	102	97	101	115	105	111	127	120	116	119	109
30	128	107	105	107	106	100	105	118	109	115	131	123	119	123	112
31	132	110	107	110	108	103	108	121	112	118	135	127	123	125	116
32	136	115	111	113	112	106	111	125	116	122	140	131	127	130	119
33	140	119	114	116	115	109	115	129	120	125	144	135	131	134	123
34	143	122	118	120	118	113	118	133	123	129	148	138	134	138	126
35	147	127	122	124	122	117	122	136	126	133	153	142	138	143	130
36	151	130	126	128	125	120	126	141	130	137	157	147	142	147	134
37	155	134	129	131	129	123	129	145	134	141	161	151	146	151	138
38	160	138	133	135	133	128	133	149	138	145	166	155	151	156	142
39	165	142	137	139	136	131	137	154	143	149	171	159	155	162	146
40	170	146	140	145	140	135	141	158	147	153	175	163	159	165	150
41	175	150	144	147	144	139	145	162	151	157	180	167	163	170	154
42	180	154	149	151	148	142	149	166	155	162	184	171	168	175	159
43	184	158	153	156	153	146	153	170	158	166	188	175	171	180	162
44	190	162	157	161	157	150	157	174	163	172	193	180	176	185	167
45	196	166	160	165	160	153	161	178	167	176	198	184	181	190	171
46	201	170	164	169	164	157	165	182	170	180	202	188	184	195	175
47	206	174	170	174	169	161	170	186	174	185	207	192	189	200	180
48	211	178	174	179	173	165	174	191	179	190	213	198	194	206	184
49	217	183	179	184	177	169	178	195	183	194	217	202	198	211	188
50	223	186	182	188	180	173	182	199	187	198	222	206	202	216	192
51	228	190	186	191	183	176	185	203	191	202	227	210	207	221	196
52	233	194	190	195	187	180	189	207	195	207	231	214	211	225	200

A 24874. 350.—3/87. Wt. 44. E. & S.

TABLE II.—SHOWING FOR EACH DISTRICT, DURING THE EIGHT YEARS 1878–85, THE MEAN AGGREGATE AMOUNTS OF RAINFALL FROM THE BEGINNING OF THE YEAR TO THE END OF EACH WEEK IN THE YEAR.

Numbers of Weeks.	Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.						Channel Islands.	Means for the British Islands generally.
	0. Scotland, N.	1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for Grazing, &c. Districts.	
	Rainfall in Inches.													
1	0·75	0·42	0·34	0·45	0·45	0·57	0·45	0·99	0·71	0·85	0·78	0·97	0·86	0·79	0·66
2	1·35	0·74	0·66	0·76	0·72	0·85	0·75	1·69	1·24	1·40	1·29	1·60	1·44	1·32	1·10
3	2·02	1·15	0·89	0·97	1·00	1·17	1·04	2·48	1·58	1·76	1·80	2·11	1·95	1·69	1·50
4	2·83	1·63	1·35	1·44	1·69	1·75	1·57	3·56	2·54	2·72	2·86	3·24	2·98	2·57	2·28
5	3·57	2·15	1·77	1·81	2·30	2·35	2·08	4·67	3·25	3·68	3·52	4·30	3·88	3·31	2·98
6	4·28	2·78	2·37	2·49	3·14	3·29	2·81	6·11	4·21	4·88	4·35	5·79	5·07	4·26	3·94
7	4·86	3·38	2·85	3·17	3·83	4·08	3·46	7·21	4·78	5·86	5·21	6·83	5·98	5·07	4·72
8	5·52	3·76	3·17	3·49	4·24	4·51	3·83	7·99	5·40	6·52	5·78	7·87	6·71	5·80	5·27
9	6·24	4·23	3·64	3·95	4·85	5·22	4·38	8·95	6·19	7·53	6·66	8·89	7·64	6·49	6·01
10	7·05	4·82	4·18	4·35	5·18	5·50	4·81	9·89	6·98	7·98	7·27	9·47	8·32	6·83	6·57
11	7·65	5·31	4·41	4·46	5·23	5·65	5·01	10·48	7·32	8·17	7·66	9·98	8·72	7·08	6·87
12	8·36	5·59	4·61	4·75	5·58	5·94	5·29	10·98	7·69	8·53	8·12	10·38	9·14	7·57	7·22
13	8·97	5·95	4·87	4·97	5·81	6·23	5·57	11·55	8·01	9·10	8·66	11·02	9·67	8·10	7·62
14	9·37	6·27	5·34	5·34	6·32	6·69	5·99	12·10	8·49	9·85	9·27	11·87	10·32	8·73	8·16
15	9·62	6·76	5·86	5·82	6·76	7·14	6·47	12·62	8·91	10·35	9·62	12·31	10·76	9·13	8·62
16	9·99	7·14	6·35	6·37	7·22	7·71	6·96	13·34	9·34	10·91	10·16	12·99	11·35	9·74	9·16
17	10·35	7·64	6·89	7·00	7·78	8·29	7·52	14·05	9·92	11·63	10·81	13·99	12·08	10·31	9·80
18	10·78	8·01	7·37	7·39	8·18	8·65	7·92	14·63	10·42	12·06	11·35	14·39	12·57	10·75	10·25
19	11·42	8·42	7·80	7·86	8·64	9·07	8·36	15·21	10·94	12·63	11·90	15·03	13·14	11·05	10·75
20	12·02	8·88	8·18	8·26	9·11	9·36	8·76	15·84	11·41	13·04	12·68	15·65	13·72	11·37	11·24
21	12·47	9·29	8·69	8·89	9·68	9·93	9·30	16·57	12·03	13·71	13·29	16·38	14·40	11·89	11·85
22	12·89	9·62	9·13	9·39	10·33	10·57	9·81	17·04	12·62	14·41	13·72	16·94	14·95	12·63	12·38
23	13·37	10·18	9·75	10·11	11·26	11·30	10·52	17·73	13·40	15·09	14·47	17·68	15·67	13·20	13·10
24	13·77	10·60	10·26	10·75	11·85	11·72	11·04	18·30	14·02	15·79	15·16	18·45	16·34	13·64	13·69
25	14·30	11·10	10·83	11·37	12·47	12·26	11·61	19·01	14·73	16·39	15·80	19·25	17·04	14·16	14·33
26	14·76	11·61	11·33	11·69	13·16	12·73	12·10	19·89	15·30	17·14	16·61	20·02	17·79	14·78	14·95
27	15·56	12·56	11·83	12·24	13·65	13·19	12·69	20·95	16·18	17·74	17·53	20·86	18·65	15·43	15·67
28	16·09	13·22	12·47	12·87	14·24	13·76	13·31	21·92	16·96	18·53	18·37	21·74	19·50	16·01	16·41
29	16·63	14·05	13·34	13·56	15·08	14·22	14·05	22·70	17·83	19·30	19·21	22·56	20·32	16·51	17·19
30	16·88	14·39	13·84	14·08	15·72	14·73	14·55	23·28	18·63	19·97	20·01	23·31	21·04	17·05	17·80
31	17·49	14·83	14·29	14·73	16·34	15·24	15·09	23·82	19·13	20·47	20·44	23·87	21·55	17·31	18·32
32	18·32	15·62	15·04	15·23	17·02	15·59	15·70	25·10	20·28	21·15	21·34	25·12	22·60	17·85	19·15
33	18·83	16·28	15·53	15·72	17·67	16·09	16·26	25·89	21·01	21·71	22·05	25·85	23·30	18·31	19·78
34	19·22	16·81	16·29	16·46	18·38	16·91	16·97	26·68	21·85	22·47	22·71	26·54	24·05	18·92	20·51
35	19·91	17·55	16·92	17·10	19·20	17·73	17·70	27·46	22·62	23·65	23·50	27·59	24·96	19·78	21·33
36	20·55	17·89	17·28	17·75	19·71	18·34	18·19	28·23	23·24	24·42	24·49	28·27	25·73	20·30	21·96
37	21·30	18·54	17·93	18·41	20·33	18·95	18·83	29·20	23·96	25·18	25·21	29·02	26·51	21·02	22·67
38	21·87	19·13	18·82	19·22	21·13	19·85	19·63	30·56	24·96	26·27	26·19	29·90	27·58	22·12	23·61
39	22·81	19·75	19·38	19·95	21·73	20·37	20·24	31·71	25·76	27·13	27·23	30·63	28·49	22·90	24·37
40	23·83	20·16	19·79	20·43	22·26	20·92	20·71	32·59	26·42	27·82	27·89	31·22	29·19	23·60	24·95
41	24·49	20·94	20·53	21·49	23·19	21·63	21·88	33·65	27·21	28·91	28·81	32·04	30·12	24·61	25·88
42	25·36	21·34	21·11	22·14	23·82	22·61	22·20	34·58	28·05	29·80	29·53	32·90	30·97	25·53	26·59
43	26·27	21·77	21·76	22·92	24·50	23·46	22·88	35·50	28·78	30·95	30·32	33·67	31·84	26·86	27·36
44	27·22	22·24	22·54	23·69	25·53	24·12	23·62	36·75	29·91	32·19	31·31	34·81	32·99	27·70	28·31
45	28·31	22·75	22·98	24·54	25·96	24·58	24·10	38·12	30·65	32·96	32·25	35·58	33·91	28·57	29·01
46	29·16	23·28	23·68	25·01	26·59	25·19	24·75	39·08	31·36	33·87	33·24	36·40	34·79	28·95	29·77
47	29·93	24·00	24·25	25·54	27·12	26·00	25·38	40·05	32·12	34·86	34·04	37·18	35·65	30·61	30·52
48	30·71	24·56	24·91	26·30	27·81	26·75	26·07	41·13	33·08	36·05	34·94	38·06	36·65	31·82	31·36
49	31·82	25·28	25·64	26·89	28·23	27·57	26·72	42·02	33·73	36·89	35·55	38·73	37·38	32·85	32·05
50	32·99	25·67	26·04	27·34	28·65	27·76	27·09	43·10	34·43	37·87	36·30	39·43	38·23	33·67	32·66
51	33·66	26·09	26·37	27·68	29·05	28·24	27·49	44·06	35·07	38·73	37·10	40·07	39·01	34·52	33·25
52	34·73	26·83	26·79	28·16	29·68	28·79	28·05	45·23	35·95	39·83	37·84	41·06	39·98	35·25	34·02

TABLE III.—SHOWING FOR EACH DISTRICT, DURING THE EIGHT YEARS 1878–85, THE MEAN AGGREGATE VALUES FOR ACCUMULATED HEAT ABOVE 42° F. FROM THE BEGINNING OF THE YEAR TO THE END OF EACH WEEK IN THE YEAR.

Numbers of Weeks.	Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.						Channel Islands.	Means for the British Islands generally.
	0. Scotland, N.	1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for Grazing &c. Districts.		
	Day Degrees, above 42° Fahrenheit.														
1	5	4	7	10	12	13	9	9	11	20	15	23	16	27	13
2	10	10	11	14	19	20	15	17	17	34	27	39	27	42	21
3	20	21	19	20	28	29	23	28	26	47	40	58	40	59	32
4	21	22	21	24	33	35	27	31	29	61	45	74	48	76	38
5	28	30	28	34	43	45	36	39	38	77	58	94	61	97	49
6	36	39	37	44	54	60	47	52	49	99	74	120	79	120	63
7	42	47	49	61	72	81	62	66	63	125	89	143	97	151	80
8	51	64	66	80	92	100	80	78	75	146	107	166	114	176	97
9	61	80	81	100	115	124	100	93	92	174	129	197	137	204	119
10	71	103	106	130	145	156	128	113	113	204	155	230	163	239	146
11	84	121	127	161	176	186	154	132	135	234	179	259	188	273	171
12	89	131	138	179	193	209	170	147	149	256	197	285	207	296	189
13	96	142	147	197	215	233	187	160	164	277	214	311	225	323	206
14	116	170	176	236	257	277	223	193	198	312	248	349	269	361	242
15	136	195	199	268	293	314	254	225	230	350	283	387	295	403	275
16	159	226	229	305	332	357	290	260	265	391	322	430	334	446	312
17	183	258	263	351	378	404	331	295	303	437	362	477	375	496	353
18	212	299	302	405	433	460	380	339	346	484	409	529	421	550	401
19	240	341	345	459	490	520	431	383	393	540	457	585	472	610	452
20	278	391	399	528	560	597	495	439	455	610	516	654	535	685	515
21	327	458	468	608	641	684	572	507	529	691	583	730	608	770	590
22	377	528	541	692	724	776	652	580	606	776	658	811	686	859	669
23	420	589	610	780	808	870	731	651	683	864	731	893	764	948	748
24	470	665	693	870	901	969	819	731	770	957	812	983	850	1045	835
25	539	757	791	978	1008	1082	923	825	871	1062	907	1081	949	1153	936
26	623	868	906	1108	1136	1216	1047	937	989	1182	1017	1196	1064	1273	1056
27	708	977	1025	1235	1259	1343	1168	1045	1103	1299	1126	1310	1177	1394	1173
28	795	1085	1145	1364	1380	1474	1290	1152	1215	1414	1229	1420	1286	1516	1288
29	875	1188	1258	1492	1506	1609	1411	1255	1328	1538	1331	1535	1397	1644	1404
30	957	1289	1366	1613	1627	1740	1527	1363	1442	1662	1436	1653	1511	1773	1519
31	1043	1398	1486	1747	1757	1879	1653	1476	1563	1791	1551	1777	1632	1908	1643
32	1134	1510	1602	1874	1882	2016	1777	1588	1681	1917	1663	1895	1749	2045	1763
33	1227	1616	1721	2005	2008	2153	1901	1697	1800	2043	1775	2013	1866	2179	1884
34	1310	1719	1828	2126	2123	2285	2016	1800	1912	2167	1881	2127	1977	2314	1997
35	1382	1805	1928	2238	2228	2407	2121	1893	2012	2281	1977	2233	2079	2440	2100
36	1461	1899	2030	2348	2333	2524	2227	1988	2116	2391	2073	2339	2181	2564	2204
37	1535	1983	2123	2455	2433	2637	2326	2079	2212	2497	2161	2434	2277	2682	2301
38	1596	2058	2209	2554	2530	2746	2419	2160	2306	2603	2242	2525	2367	2799	2393
39	1652	2125	2282	2632	2608	2835	2496	2230	2383	2690	2313	2607	2445	2901	2471
40	1700	2183	2342	2696	2670	2911	2560	2290	2447	2768	2374	2680	2512	2996	2536
41	1743	2231	2393	2751	2720	2975	2614	2341	2500	2834	2422	2737	2567	3081	2591
42	1778	2271	2438	2799	2765	3030	2661	2388	2546	2896	2470	2794	2619	3158	2640
43	1801	2295	2467	2835	2798	3070	2693	2416	2577	2943	2501	2833	2654	3218	2674
44	1820	2317	2494	2866	2826	3107	2722	2444	2607	2989	2531	2873	2689	3275	2706
45	1841	2342	2518	2894	2854	3143	2750	2472	2636	3031	2562	2914	2723	3331	2737
46	1852	2355	2533	2909	2869	3164	2766	2487	2655	3063	2583	2945	2747	3372	2757
47	1859	2362	2542	2921	2881	3180	2777	2499	2667	3087	2596	2965	2763	3408	2770
48	1868	2373	2555	2936	2897	3200	2792	2513	2682	3115	2613	2990	2783	3444	2788
49	1871	2378	2562	2945	2906	3212	2800	2520	2690	3130	2622	3003	2793	3468	2797
50	1876	2385	2571	2954	2916	3226	2810	2529	2701	3149	2633	3019	2806	3493	2808
51	1882	2391	2575	2960	2922	3237	2817	2537	2709	3165	2644	3043	2820	3519	2819
52	1890	2399	2583	2966	2931	3251	2826	2549	2720	3190	2659	3064	2837	3547	2832

TABLE IV.—SHOWING FOR EACH DISTRICT, DURING THE EIGHT YEARS 1878–85, THE MEAN AGGREGATE VALUES FOR ACCUMULATED HEAT BELOW 42° FAHRENHEIT, FROM THE BEGINNING OF THE YEAR TO THE END OF EACH YEAR.

Numbers of Weeks.	Principal Wheat-producing Districts.							Principal Grazing, &c. Districts.						Channel Islands.	Means for the British Islands generally.
	0. Scotland, N.	1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for Grazing, &c. Districts.		
	Day-Degrees below 42° Fahrenheit.														
1	33	41	29	30	29	18	29	27	23	10	19	11	18	5	24
2	71	85	73	83	80	63	77	64	62	36	49	36	49	19	63
3	105	128	115	133	128	104	122	99	97	62	80	63	80	35	101
4	143	181	167	182	182	146	172	142	143	89	121	88	117	51	144
5	170	214	202	220	219	177	206	166	171	107	143	103	138	58	172
6	194	242	229	247	243	194	231	183	191	114	161	110	152	61	192
7	225	275	252	268	262	206	253	204	207	119	181	120	166	61	210
8	255	307	279	294	289	226	279	228	230	134	199	136	185	66	232
9	284	337	303	317	310	242	302	249	246	144	215	143	199	69	251
10	314	360	324	338	331	258	322	264	261	155	230	154	213	74	268
11	342	391	351	367	359	281	350	286	280	169	250	168	231	79	291
12	379	427	384	400	392	305	382	312	306	185	274	185	252	84	317
13	415	462	415	435	426	329	414	339	332	204	299	205	276	89	345
14	433	484	433	454	447	341	432	356	348	212	315	216	289	91	361
15	450	499	445	467	459	350	444	367	356	218	324	223	298	92	371
16	464	511	457	480	473	358	456	376	367	225	332	228	306	93	381
17	477	520	464	488	482	364	464	383	373	228	337	233	311	93	388
18	487	528	473	497	493	369	472	389	378	231	343	235	315	93	394
19	499	537	480	503	500	372	478	396	382	233	348	238	319	93	399
20	505	542	482	506	503	373	481	398	383	233	349	239	321	93	401
21	508	543	482	507	504	373	482	398	383	233	350	239	321	93	402
22	508	543	482	507	504	373	482	398	383	233	350	239	321	93	402
23	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
24	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
25	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
26	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
27	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
28	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
29	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
30	510	543	482	507	504	373	482	398	383	233	350	339	321	93	402
31	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
32	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
33	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
34	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
35	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
36	510	543	482	507	504	373	482	398	383	233	350	239	321	93	402
37	510	543	482	507	505	373	482	398	383	233	350	239	321	93	402
38	510	543	482	507	505	373	482	398	383	233	350	239	321	93	402
39	511	544	482	507	506	373	482	398	383	234	350	239	321	93	402
40	512	545	482	508	508	374	483	398	383	234	350	239	321	93	402
41	517	551	485	510	512	376	487	402	384	234	352	240	322	93	405
42	523	554	488	512	516	377	489	404	385	234	354	241	324	93	407
43	540	575	500	524	530	384	503	418	394	238	366	249	333	93	418
44	554	590	510	533	542	392	513	427	402	241	372	255	339	93	426
45	572	610	526	551	561	403	530	440	413	244	384	264	349	93	440
46	592	636	544	573	586	421	552	460	427	252	400	275	363	94	458
47	618	667	570	597	616	440	578	484	448	264	422	291	382	94	480
48	644	697	596	626	644	463	605	505	466	275	441	305	398	97	502
49	685	743	639	671	695	500	650	545	501	301	482	337	433	106	542
50	717	790	683	712	737	532	691	579	532	321	514	368	463	116	577
51	753	831	721	754	776	563	729	608	561	336	542	391	488	122	609
52	785	872	755	787	811	589	763	632	589	350	565	410	509	126	636

TABLE V.—SHOWING FOR EACH DISTRICT, DURING THE FIVE* YEARS 1881–85, THE MEAN AGGREGATE NUMBERS OF HOURS OF BRIGHT SUNSHINE FROM THE BEGINNING OF THE YEAR TO THE END OF EACH WEEK IN THE YEAR.

Numbers of Weeks.	Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.						Channel Islands.	Means for the British Islands generally.
	0. Scotland, N.	1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for Grazing, &c. Districts.		
	Number of Hours of Bright Sunshine.														
1	5	11	7	10	9	10	9	6	8	12	11	14	10	14	10
2	12	21	14	20	17	18	18	13	15	23	18	25	19	31	19
3	21	35	20	26	23	23	25	22	23	33	32	39	30	44	28
4	26	48	28	41	32	33	36	29	32	41	42	50	39	56	38
5	35	60	35	54	43	44	47	35	40	55	52	63	49	76	48
6	43	72	42	67	56	57	59	48	50	69	68	79	63	96	61
7	58	88	54	82	69	71	73	60	61	83	81	92	75	118	74
8	74	118	72	97	86	86	92	77	78	102	99	113	94	144	93
9	93	136	89	119	107	109	112	91	97	122	111	129	110	168	111
10	114	158	109	143	129	130	134	113	115	147	130	155	132	194	133
11	130	187	140	178	160	164	166	136	141	183	157	184	160	242	163
12	158	224	167	211	193	199	199	164	165	224	186	215	191	282	195
13	188	249	192	251	223	235	230	194	191	255	217	249	221	318	226
14	228	283	233	302	264	276	272	241	236	296	260	298	266	361	269
15	268	307	250	329	288	304	296	272	262	330	292	332	298	405	297
16	301	340	274	363	318	336	326	303	294	370	328	367	332	448	329
17	332	380	302	399	352	370	361	330	321	411	357	400	364	497	363
18	371	411	341	438	390	412	398	373	366	456	396	449	408	549	403
19	410	458	385	486	435	456	444	418	413	505	445	501	456	611	450
20	457	507	441	547	486	510	498	469	469	564	496	558	511	677	505
21	503	561	503	607	537	563	554	520	523	612	537	603	559	734	557
22	544	618	548	663	587	615	606	572	575	663	589	651	610	785	608
23	591	656	580	710	621	653	644	613	619	711	625	692	652	843	648
24	629	693	621	757	666	701	688	657	665	769	659	734	697	907	693
25	658	727	650	795	700	738	722	692	695	813	689	770	732	962	727
26	695	775	691	850	747	791	771	730	736	858	718	807	770	1015	771
27	728	809	733	905	795	842	817	765	775	905	741	834	864	1067	811
28	759	853	782	956	839	892	864	805	819	955	776	873	846	1125	855
29	789	888	817	996	873	928	900	847	854	988	808	905	880	1164	890
30	823	927	852	1040	909	972	940	885	891	1039	839	943	919	1223	930
31	845	964	886	1074	944	1012	976	921	928	1084	869	977	956	1292	966
32	868	1002	925	1115	984	1057	1017	963	965	1130	900	1016	995	1351	1006
33	895	1036	959	1162	1029	1105	1058	998	1003	1176	931	1051	1032	1408	1045
34	923	1073	988	1199	1068	1146	1095	1033	1039	1229	961	1091	1071	1466	1083
35	954	1103	1004	1222	1088	1173	1118	1055	1056	1259	980	1117	1093	1496	1106
36	986	1139	1032	1252	1117	1202	1148	1090	1088	1300	1007	1151	1127	1532	1138
37	1014	1163	1061	1289	1150	1237	1180	1123	1124	1338	1036	1184	1161	1580	1171
38	1035	1180	1083	1318	1176	1265	1204	1142	1147	1369	1058	1211	1185	1621	1195
39	1059	1209	1110	1354	1207	1298	1236	1170	1176	1399	1082	1240	1213	1659	1225
40	1084	1235	1137	1378	1230	1320	1260	1195	1201	1429	1104	1266	1239	1687	1250
41	1107	1254	1157	1397	1250	1343	1280	1216	1219	1451	1125	1294	1261	1717	1271
42	1124	1274	1174	1417	1274	1365	1301	1230	1233	1473	1142	1311	1278	1744	1290
43	1146	1298	1188	1438	1289	1382	1319	1249	1247	1491	1162	1330	1296	1764	1308
44	1157	1313	1198	1453	1302	1397	1333	1262	1260	1506	1176	1348	1310	1782	1322
45	1170	1331	1211	1473	1317	1413	1349	1274	1272	1520	1191	1364	1324	1799	1337
46	1179	1341	1219	1486	1330	1427	1361	1284	1283	1535	1207	1380	1338	1821	1350
47	1186	1352	1234	1502	1345	1441	1375	1296	1295	1551	1222	1397	1352	1835	1364
48	1195	1360	1241	1510	1354	1450	1383	1302	1302	1561	1231	1406	1360	1848	1372
49	1206	1372	1249	1520	1363	1458	1392	1313	1309	1576	1244	1419	1372	1860	1382
50	1210	1381	1255	1529	1370	1467	1400	1320	1314	1585	1252	1432	1381	1870	1391
51	1213	1388	1262	1538	1379	1477	1409	1325	1319	1592	1257	1439	1386	1879	1398
52	1216	1398	1267	1542	1382	1480	1414	1330	1322	1598	1263	1448	1392	1887	1403

* The Sunshine Recorders were not in operation until April 1880.

TABLE VI.—SHOWING FOR EACH DISTRICT, DURING THE FIVE* YEARS 1881-85, THE MEAN PERCENTAGES OF THE POSSIBLE AMOUNT OF BRIGHT SUNSHINE FROM THE BEGINNING OF THE YEAR TO THE END OF EACH WEEK IN THE YEAR.

Numbers of Weeks.	0. Scotland, N.	Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.						Channel Islands.	Means for the British Islands generally.
		1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for Grazing, &c. Districts.		
	Percentages of Possible Duration.														
1	12	24	13	18	17	17	18	12	14	22	21	27	19	25	19
2	13	22	13	18	16	17	17	13	14	21	18	23	18	27	18
3	14	24	13	16	14	14	16	14	14	19	19	24	18	25	17
4	13	24	13	18	14	14	17	14	15	18	19	23	18	24	18
5	14	23	13	19	15	15	17	13	14	19	19	22	17	25	17
6	14	23	12	19	16	16	17	14	15	19	20	23	18	26	18
7	15	23	13	20	16	16	18	15	15	20	20	22	18	27	18
8	16	26	15	20	17	17	19	16	16	20	20	23	19	28	19
9	18	26	16	21	19	19	20	17	18	21	20	23	20	28	20
10	19	26	17	22	20	20	21	18	18	23	21	24	21	29	21
11	19	27	20	25	22	23	23	19	20	25	22	25	22	32	23
12	21	29	21	26	24	24	25	21	21	27	24	27	24	34	25
13	22	29	22	28	25	26	26	22	22	28	25	28	25	34	26
14	24	30	24	30	27	28	28	25	24	30	27	30	27	36	28
15	26	29	23	30	26	28	27	25	24	30	27	31	27	36	27
16	26	30	23	31	27	28	28	26	25	31	28	31	28	37	28
17	27	30	24	31	27	29	28	26	25	32	28	31	28	38	28
18	27	30	25	31	28	30	29	27	27	33	28	33	30	39	30
19	28	31	26	32	29	30	30	28	28	34	30	34	31	40	31
20	29	32	28	34	30	32	31	29	29	35	31	35	32	42	32
21	29	33	29	35	31	33	32	30	30	36	31	35	32	43	32
22	30	34	30	36	32	34	33	31	31	36	32	36	33	44	33
23	30	34	30	37	32	33	33	32	32	37	32	36	34	43	34
24	30	34	30	37	32	34	33	32	32	37	32	35	34	44	34
25	30	34	30	37	32	34	33	32	32	38	32	36	34	44	34
26	30	34	30	37	33	35	34	32	32	38	31	35	34	45	34
27	30	33	30	38	33	35	34	32	32	38	31	35	34	44	34
28	30	34	31	38	33	36	34	32	32	38	30	34	33	45	34
29	29	33	31	38	33	35	34	32	32	38	31	34	33	45	34
30	29	33	31	38	33	35	34	32	32	38	30	35	33	45	34
31	29	33	31	38	33	36	34	32	32	38	30	34	33	46	34
32	29	33	31	38	33	36	34	32	32	38	30	34	33	46	34
33	29	33	31	38	34	36	34	32	32	39	30	34	33	47	34
34	29	33	31	38	34	37	35	33	33	39	30	35	34	47	35
35	28	33	31	38	34	36	34	32	32	39	30	34	33	47	34
36	29	33	31	38	33	36	34	32	32	39	30	35	34	46	34
37	29	33	31	38	33	37	34	32	32	39	30	35	34	46	34
38	29	33	31	38	34	36	34	32	32	39	30	34	33	47	34
39	29	33	31	38	34	37	35	32	33	39	30	34	33	46	34
40	29	33	31	38	33	35	34	32	33	39	30	35	34	46	34
41	29	33	31	37	33	36	34	32	32	39	30	34	33	46	34
42	29	33	30	37	34	36	34	32	32	39	30	34	33	46	34
43	29	33	30	37	33	36	34	32	32	39	30	34	33	46	34
44	28	32	30	37	33	35	33	32	32	38	30	34	33	45	33
45	29	33	30	37	33	35	34	31	32	38	29	34	33	45	34
46	28	32	30	37	33	35	33	31	31	38	29	34	33	45	33
47	28	32	30	37	33	35	33	31	31	38	29	34	33	45	33
48	28	32	29	36	32	35	33	31	31	37	29	33	32	44	33
49	28	32	29	36	32	34	33	31	31	37	29	33	32	44	33
50	28	32	29	36	32	34	33	31	31	37	29	33	32	44	33
51	28	32	29	35	32	34	32	30	30	37	29	33	32	43	32
52	27	32	29	35	31	34	32	30	30	36	28	33	31	43	32

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